Public Utility Commission of Texas

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Robert W. Gee
Chairman

Sarah Goodfriend
Commissioner

January 13, 1995

Honorable Members of the Seventy-Fourth Texas Legislature:

We are pleased to submit to you our 1995 report on the Scope of Competition in Telecommunications Markets in Texas. This report, which is required by Section 18(k) and (p) of the Public Utility Regulatory Act, addresses the scope of telecommunications competition in the State and the impact of competition on residential and business customers.

The Commission has made a special effort to address the existence and impact of competition in local exchange telecommunications. In order to provide this information to you, the Commission gathered data from all telecommunications utilities under our jurisdiction. Additionally, however, because we lack authority to require reporting from any unregulated competitor, it was necessary for the Commission to conduct separate studies of actual and potential competitors in an effort to present a more thorough analysis of the competitive environment. Finally, we wish to point out that this 1995 report reflects a particular effort to report on competition in rural areas of the state.

The Commission recognizes the Legislature's need for timely and accurate information, and we sincerely hope this report will be useful to you as you consider the important issues of telecommunications regulation and competition. If you would like more information about the issues addressed in the report, please feel free to call on us.

Very truly yours,

Robert W. Gee
Chairman

Sarah Goodfriend
Commissioner

SCOPE OF COMPETITION IN TELECOMMUNICATIONS MARKETS

PUBLIC UTILITY COMMISSION OF TEXAS

7800 Shoal Creek Blvd.
Austin, Texas 78757 • (512) 458-0100

JANUARY 13, 1995

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LIST OF EXHIBITS

LIST OF ACRONYMS

ALJ	Administrative Law Judge
CAP	Competitive access provider
CATV	Community antenna television
CCN	Certificate of Convenience and Necessity
CGSA	Cellular Geographic Service Area
C.O.	Central office
COCOT	Customer-owned coin-operated telephone
CPE	Customer premises equipment
CSM	Communications Services Management
DSM	Demand-side Management
EAS	Extended area service
ELC	Expanded toll-free local calling
ESMR	Enhanced specialized mobile radio
FCC	Federal Communications Commission
GTE/Contel	GTE Southwest Inc./Continental Telephone
HHI	Hirschman-Herfindahl Index
HL&P	Houston Lighting & Power Co.
IOU	Investor-owned utility
IXC	Interexchange carrier
IXCDR	Interexchange carrier data report
LATA	Local access and transport area
LCRA	Lower Colorado River Authority
LEC	Local exchange carrier
LECDR	Local exchange company data report
Mbps	Megabits per second
MFS	Metropolitan Fiber Systems
MOU	Minutes of use
MSA	Metropolitan Statistical Area
MTS	Message telecommunications service
NANP	North American Numbering Plan
OSP	Operator service provider
PBX	Private branch exchange
PCS	Personal communications system
POP	Point of presence
POTS	Plain Old Telephone Service
PURA	Public Utility Regulatory Act
RMTS	Residential multi-tenant service
RSA	Rural serving area
SMA	Special marketing area
SMR	Specialized mobile radio

SMSi	Southwestern Bell Messaging Services, Inc.
STS	Shared tenant service
SWB	Southwestern Bell Telephone Company
TCI	Tele-Communications, Inc.
TEXALTEL	Texas Association of Long-Distance Telephone Companies
VMS	Voice messaging service
WATS	Wide Area Telecommunications Service

EXECUTIVE SUMMARY

Since its creation in 1975, the Public Utility Commission has had jurisdiction over telecommunications utilities in the state of Texas. In mid-1994 there were 61 local exchange companies (LECs), nine competitive access providers (CAPs), 14 facilities-based interexchange carriers (IXCs) and several hundred resellers providing telecommunications service in the state.

The Commission is required to report to each Legislature on the scope of competition in telecommunications markets. To gather data for this biennial report, the Commission ordered each telecommunications utility operating in the state to respond to a questionnaire or data report. Separate questionnaires were sent to LECs, CAPs and IXCs. More than 500 reports were received and analyzed.

For the purposes of this report, competition was analyzed in terms of three distinct areas of the state: metro areas consisting of the six most populous counties, rural areas (the 151 least populous counties), and other areas. Our study of local competition finds that the annual revenues of CAPs have increased significantly since the time of our 1993 report. Nevertheless, in those markets in which LECs and CAPs compete, LEC revenues are still far greater than those of CAPs. Moreover, CAP activities still are limited to the six metro counties. Cable TV providers, whose networks pass 81 percent of the housing units in Texas, represent the most significant source of potential competition to LECs in the future. Significantly, many large cable TV companies have affiliations with CAPs.

Texas law and Commission policy permit intraLATA long-distance competition. The intraLATA market as a whole, however, remains dominated by LECs because of their 1+ dialing advantage. IXCs enjoy a large share of the 800 and Wide Area Telecommunications Service (WATS) sub-markets. The Commission, in response to a petition for rulemaking filed by several IXCs, has initiated two projects to explore issues

in the intraLATA telecommunications market: intraLATA dialing parity and competitive issues arising from extended area service (EAS).

Expanded toll-free local calling (ELC) substitutes a mandatory monthly fee to the LEC for usage-sensitive charges by LECs or IXCs. Mandated by the 73rd Legislature, ELC eliminates competition for certain short-haul intra-LATA calling in rural areas. The ELC program is well-received, with more than 290 exchanges having filed petitions for ELC.

Statewide, interLATA long-distance remains highly concentrated, with a Hirschman-Herfindahl index (HHI) of about 4000 for facilities-based carriers. (A market with an HHI over 1800 is regarded as highly concentrated.) The four-firm concentration ratio for each service studied is over 90 percent, with an overall four-firm concentration ratio around 95 percent.

Equal access, which gives customers both 1+ and 10XXX access to more than one long distance carrier, continues to spread in rural areas of the state. With this growth in equal access, the share of access minutes of use of the top four IXCs declined somewhat in rural areas.

The Commission offers several legislative recommendations for improving the regulatory framework for the telecommunications industry in Texas. The recommendations address clarification of the definition of a telecommunications utility in the Public Utility Regulatory Act (PURA) Section 3 and a need for broadening the Commission's authority to gather data from telecommunications utilities and their competitors in order to carry out its duty under PURA Section 18 to report to the Legislature on the scope of competition in telecommunications markets.

INTRODUCTION

In 1987, the 71st Legislature adopted amendments to the Public Utility Regulatory Act (PURA) addressing issues of competition in telecommunications markets. These amendments are found in Sections 18 of PURA. The Legislature directed the Public Utility Commission of Texas (Commission) to report biennially on the scope and impact of competition in telecommunications markets (PURA Section 18(k) and (p)).

This fourth biennial report on the scope of competition has five sections, including this introduction. The second, third and fourth sections address competition in local, intraLATA long-distance and statewide long-distance markets, respectively. The final section contains recommendations to the 74th Legislature regarding telecommunications regulation.

Local exchange companies (LECs), interexchange carriers (IXCs), and competitive access providers (CAPs) completed data reports providing information on revenues and the number of customers they serve for various services and across different geographic regions of the state. This information was aggregated and used to provide an overview of the scope of competition in each of the three types of markets discussed in this report.

A lively debate is being conducted at the federal, state and local levels about the proper roles of government oversight and private initiative in strengthening and extending our country's vital telecommunications infrastructure. The information in this report is offered as a contribution to the factual underpinnings of that debate. We attempt here to present information that will help the members of the Texas legislature evaluate their policy alternatives and ordinary Texans understand the facts underlying this great debate.

Our discussion of the scope of competition in telecommunications markets will focus not only on the existence of actual or potential competitors for local

telecommunications services, but also on the geographic areas in which they are a factor. For this purpose, we have divided the state into three broadly defined areas:

1) ***Metro*** counties include the six most populous counties. These counties--Bexar, Tarrant, Dallas, El Paso, Travis and Harris--each had a population of more than 500,000 according to the 1990 census. The analysis and discussion that follow will demonstrate that competition for telecommunications services is most active in these six counties, and that many competitors provide service in only the metro areas of the state.

2) At the other end of the spectrum are the 151 ***Rural*** counties. These counties, listed in Exhibit I, each had a population of fewer than 20,000 in the 1990 census. In our study of telecommunications competition, we have attempted to measure the extent to which rural customers enjoy the benefits of telecommunications competition and to assess the likelihood that further competition is on their horizon.

3) The remaining 97 counties of the state constitute the ***Other*** counties (see Exhibit I). These include suburban areas and areas with small cities throughout the state. For the most part, residents of these areas of Texas have access to cable TV, and actual and potential telecommunications competition in these areas is greater than that in the rural areas.

COMPETITION IN LOCAL EXCHANGE TELECOMMUNICATIONS

Observers of the telecommunications industry take a variety of positions regarding prevailing competition. These two differing views were offered in the April 19, 1994, *Wall Street Journal:*

> *The monopoly on local service held today by the regional Bell Operating Companies is every bit as tight as the monopoly held by AT&T before the Bell breakup.*
>
> William F. Baxter, Reagan assistant attorney general and Stanford law professor

> *We have a very creaky communications policy in this country--essentially a system that follows the design of the turn-of-the-century, when railroads had to seek approval for line extensions. What government should do is set a certain date for telecommunications and cable companies to begin their competition with each other. Period.*
>
> Barry Diller, chairman and CEO, QVC Inc.

MARKET PARTICIPANTS

There are 61 certified Local Exchange Carriers (LECs) in Texas; the largest, Southwestern Bell Telephone Company (SWB), serves roughly three out of four of the state's subscribers. Each LEC provides service within an area designated in its Certificate of Convenience and Necessity (CCN). With rare exceptions, the certified service areas for LECs do not overlap, so every certified area of the state has only one provider of basic local telephone service. That is to say, basic local telephone service is a monopoly service. In addition to LECs, there are several other types of providers that either currently provide some local services or that are positioning themselves to provide such services in the future, including competitive access providers (CAPs), cable

television providers, wireless providers, and electric utilities. Each type of provider faces unique regulatory, economic and technical constraints.

In this section of the report, we first discuss the LECs, using information they provided on a Commission questionnaire known as the Local Exchange Carrier Data Report (LECDR) (Exhibit II) including estimates of their revenues and number of customers as well as their perceptions of current and potential market participants and any significant barriers they find to providing different local exchange services. Then, using information collected from various industry providers and associations, we provide an overview of some of the current and future competitors in the major telecommunications service markets in Texas.

LOCAL EXCHANGE COMPANIES (LECs)

The term Local Exchange Carrier or LEC is used to describe the monopoly providers of basic local service and includes 1) investor-owned utilities (IOUs) and 2) cooperatives (Co-ops). Most Texans, and all those living in urban areas, are served by IOUs. Texas has 36 IOUs serving almost 10 million access lines, the largest being Southwestern Bell Telephone Company (SWB) and GTE Southwest Inc./Continental Telephone (GTE-Contel). Many rural areas of the state are served by telephone cooperatives. Texas has 25 certified telephone cooperatives, which serve a combined total of over 100,000 access lines. The 61 IOUs and co-ops certified in Texas, along with the respective number of access lines they serve, are shown in Exhibit III. IOUs earn about 61 times as much revenue as Co-ops, although they serve 100 times as many access lines.

The Public Utility Regulatory Act (PURA) charges the Public Utility Commission of Texas with setting rates for telephone utilities that are just and reasonable. PURA requires that utility rates be set at a level that allows the utility the opportunity to earn a reasonable return on its invested capital. To this end, the Commission monitors the earnings of LECs, which are filed quarterly by the telephone companies. The chart "1993

LEC Revenues" provides information about LEC revenues in 1993 by LEC type and major service category compiled from LEC earnings monitoring reports for 1993.

LECs provide a variety of services in the local exchange market. Based on responses to the LEC questionnaire, the following subsections provide a summary of LEC revenues and customers for many of these services. In addition, LECs' responses to the questionnaire regarding current and potential competitors and barriers to entry are summarized. (Toll service is reviewed in the intraLATA toll section of the report.)

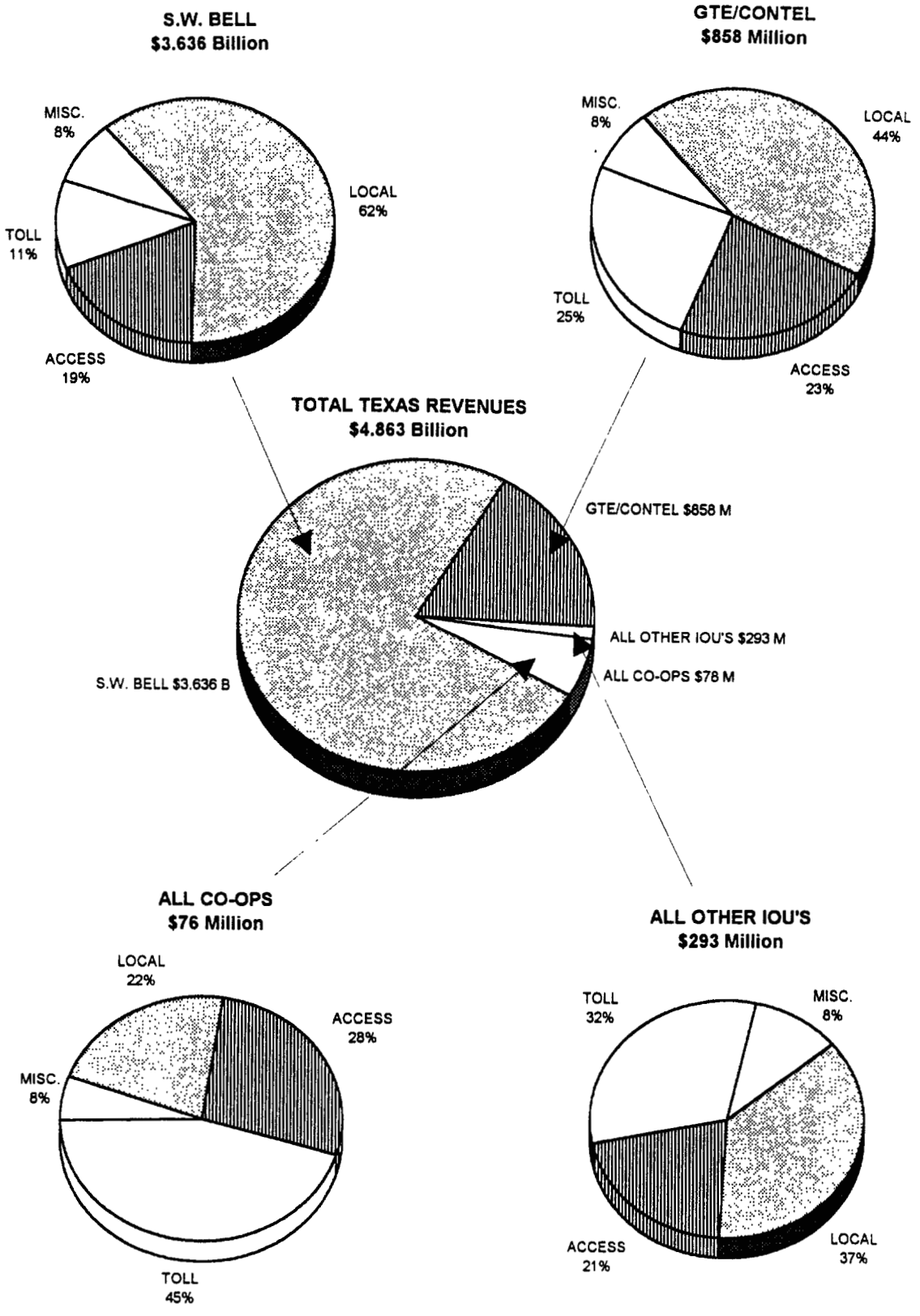
Four LECs were exempted from filing because they have no facilities or very few customers in the state, so only 57 of the 61 certified LECs responded to the LEC questionnaire. Revenue data is summed and reported in two one-year periods, July 1, 1992 to June 30, 1993 and July 1, 1993 to June 30, 1994. Customer counts are reported in the same two one-year periods as the average of the number of customers reported by the LEC for each of the two six-month periods in each study year. The reported number for customers is rounded to the nearest whole number, whereas the reported number for percent growth in customers is derived from the non-rounded customer totals. Exhibit IV provides a breakdown of revenue and customer data between Co-ops and IOUs.

Local Exchange Services

Basic Area Service

Basic area service is sometimes called Plain Old Telephone Service or POTS. Revenues from basic area service increased by 7.3 percent ($1,383,663,768 to $1,484,498,645) from year one (July 1992 to June 1993) to year two (July 1993 to June 1994) of the study period.

1993 LEC REVENUES



Information From Earnings Monitoring Report

BASIC AREA SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$869,366,767	$905,871,774	4.2%
Rural Counties	$69,188,540	$83,282,798	20.4%
Other Counties	$445,108,461	$495,344,073	11.3%
Total	$1,383,663,768	$1,484,498,645	7.3%

The number of residential customers of basic area service increased by 2.7 percent (10,146,122 to 10,422,229) from year one to year two of the study period, while the number of business customers decreased by 10.6 percent (1,249,424 to 1,116,723).

BASIC AREA SERVICE CUSTOMERS

I) Residential

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	4,096,457	4,127,658	0.8%
Rural Counties	1,607,271	1,784,873	11.0%
Other Counties	4,442,394	4,509,699	1.5%
Total	10,146,122	10,422,229	2.7%

II) Business

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	445,891	453,141	1.6%
Rural Counties	227,838	229,132	0.6%
Other Counties	575,696	434,451	(24.5%)
Total	1,249,424	1,116,723	(10.6%)

While the number of residential customers for basic area service has been growing, a significant number of Texas households still do not have telephones. In 1993, 91.6 percent of Texas households had telephones, leaving 8.4 percent, or approximately 5.4 million homes without phones.[1] The percentage with a telephone has increased slightly from 89.4 percent in 1990. In 1990, in 151 of 254 counties less than 90 percent of the households had telephones, as shown in the figure "1990 Texas Telephone

[1] *Monitoring Report*, CC Docket No. 87-339, Federal Communications Commission, May 1994. *Texas Household Estimates For Calendar Years 1970 to 2016*, Texas Comptroller of Public Accounts, Fall 1993.

Penetration Levels by County." (In addition, Exhibit V provides a comparison of annual telephone penetration levels for every state from 1984 to 1993.) Several steps have been taken to raise these percentages, such as establishment of Lifeline programs, which provide reduced rates for low-income families. Since December of 1990, ten LECs have initiated such programs, bringing the total number of companies offering Lifeline programs to 18.[2]

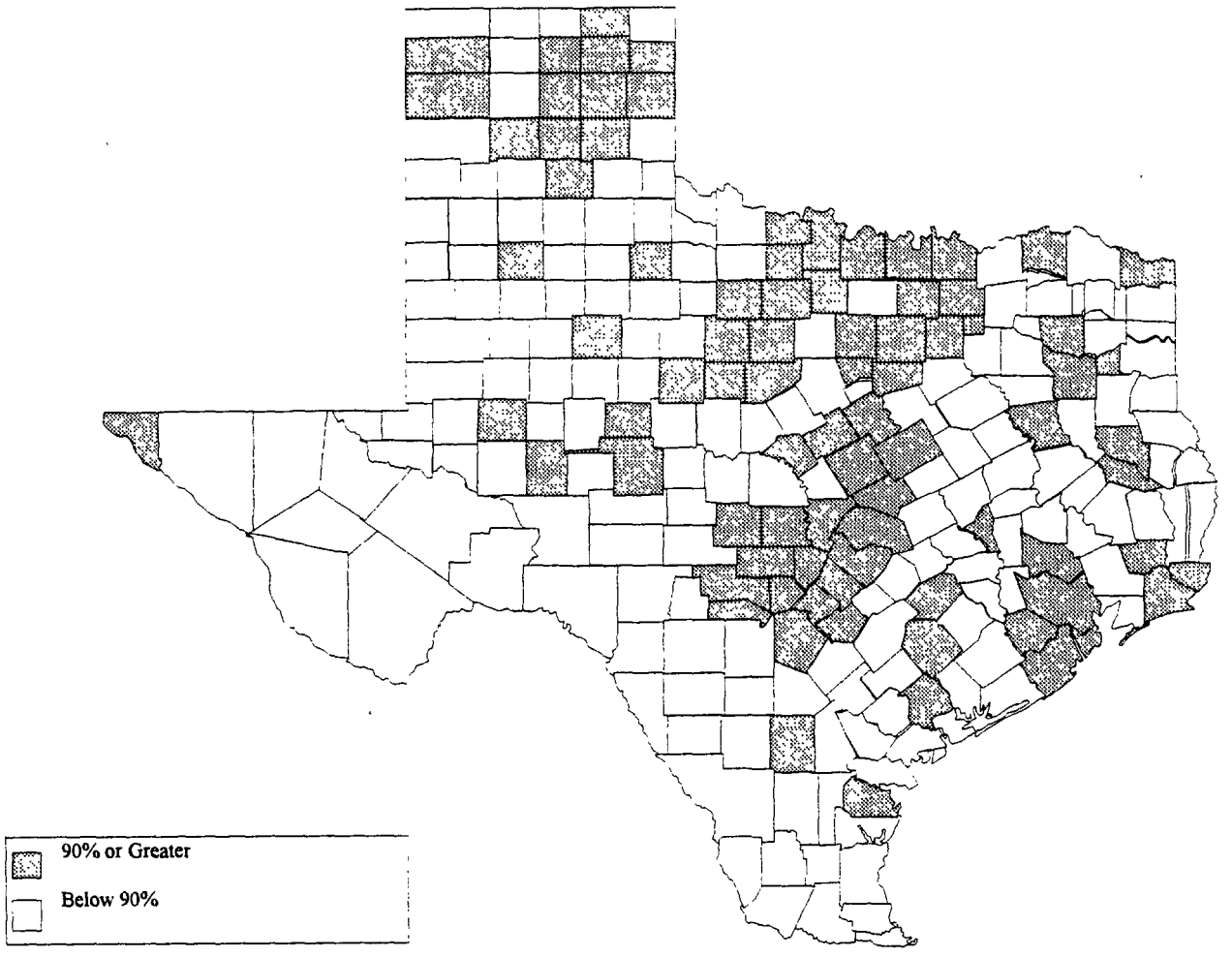
A number of LECs serving all geographic areas cite cellular providers as current competitors for basic area service. Most companies provide no estimate of market share. The estimates provided by the LECs for cellular companies' market share of basic area service range from one to ten percent.

A number of LECs serving all geographic areas list several different providers as competitors for basic area service, including the following: CATV providers, CAPs, cellular providers, Personal Communications Service (PCS) providers, interexchange carriers (IXCs), electric utilities, government entities, nationwide retailers, and Enhanced Specialized Mobile Radio Service (ESMR) providers.

LECs responding to the questions seeking an identification of barriers to entry into the market to provide basic area service list primarily legal and economic barriers. The economic barriers pertain only to rural and other counties. Most LECs list the need to acquire a Certificate of Convenience and Necessity (CCN) from the Commission as the main legal barrier to entry. Some smaller LECs also state that current regulatory restrictions do not allow them the required pricing flexibility to meet competition in the existing marketplace. Small LECs providing service in rural and other counties note that construction and deployment of the required infrastructure, particularly in low population density areas, creates an economic barrier to entry.

[2] In addition to the company-specific Lifeline programs, Tel-assistance is a statewide program offered by all LECs to reduce the cost of basic telephone service. Tel-assistance has much more restrictive qualifications than the company-specific Lifeline programs.

1990 TEXAS TELEPHONE PENETRATION LEVELS BY COUNTY



Source: Bureau of the Census, Household Characteristics, CH 2-45, Sept. 1993

Extended Area Service

Extended area service is an extension of basic area service outside the local calling scope. There are several variations, including optional extended area, mandatory extended area, and expanded toll-free local calling. For a more detailed description of extended area service, refer to the Competition in IntraLATA Long-Distance Telecommunications section.

Revenues from extended area service increased by 13.9 percent ($209,033,464 to $238,026,206) from year one to year two of the study period.

EXTENDED AREA SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$122,735,691	$127,996,581	4.3%
Rural Counties	$13,843,780	$16,559,646	19.6%
Other Counties	$72,453,993	$93,469,979	29.0%
Total	$209,033,464	$238,026,206	13.9%

The number of extended area service customers decreased by 2.2 percent (4,714,040 to 4,610,348) from year one to year two of the study period, while the number of business customers decreased by .4 percent (575,920 to 573,411).

EXTENDED AREA SERVICE CUSTOMERS

I) Residential

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	1,491,223	1,434,635	(3.8%)
Rural Counties	896,315	875,616	(2.3%)
Other Counties	2,326,502	2,300,098	(1.1%)
Total	4,714,040	4,610,348	(2.2%)

II) Business

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	146,550	156,541	6.8%
Rural Counties	139,473	133,533	(4.3%)
Other Counties	289,897	283,337	(2.3%)
Total	575,920	573,411	(0.4%)

Private Line or Virtual Private Line

Private line service consists of transmission facilities that are dedicated to a customer and that are not directly connected to the public switched telephone network. LECs may, with Commission approval, provide high-speed private line services (for transmission rate of 1.544 megabits or greater) priced on a customer-specific basis.

PURA Section 18(e)(3)(B) permits the price of these private line services to be set by contracts specific to the customer. Substantive Rule 23.27 outlines the procedure for Commission approval of customer-specific contracts. In addition, SWB has a Customer-Specific Pricing Plan Tariff for High Capacity Network Service. Under this tariff SWB submits informational filings in which it (1) identifies the customer; (2) describes the service, location, and contract term; and (3) specifies the monthly rate and non-recurring charge associated with the service. The Commission takes no action on these filings other than to acknowledge receipt.

LECs filed one application for customer specific contracts for private line service in fiscal year 1993 and two applications in fiscal year 1994. Additionally, SWB submitted 35 informational filings pursuant to its Customer-Specific Pricing Plan Tariff for High Capacity Network Service in fiscal year 1993 and 28 in fiscal year 1994.

Revenues from private line service decreased by 2.4 percent ($95,035,535 to $92,766,559) from year one to year two of the study period.

PRIVATE LINE SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$63,057,641	$56,257,561	(10.8%)
Rural Counties	$5,810,068	$6,566,720	13.0%
Other Counties	$26,167,826	$29,942,278	14.4%
Total	$95,035,535	$92,766,559	(2.4%)

Business customers make up the majority of customers for private line service. Residential customers from private line service decreased by 5.5 percent (24,047 to

22,732) from year one to year two of the study period, while business customers decreased by 6.9 percent (127,877 to 119,020).

PRIVATE LINE SERVICE CUSTOMERS

I) Residential

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	2,151	2,091	(2.8%)
Rural Counties	9,508	8,976	(5.6%)
Other Counties	12,389	11,666	(5.8%)
Total	24,047	22,732	(5.5%)

II) Business

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	24,554	23,987	(2.3%)
Rural Counties	39,319	36,100	(8.2%)
Other Counties	64,005	58,933	(7.9%)
Total	127,877	119,020	(6.9%)

A number of LECs serving all geographic areas cite several providers as competitors for private line service, including the following: CAPs, IXCs, satellite systems, electric utilities, CATV providers, private business networks like those of WalMart and Chevron, private radio networks, and microwave providers. Most companies provide no estimate of the actual market share lost to these competitors. Those LECs providing an estimate place the market share of private line service competitors between two and 60 percent.

LECs in all geographic areas list numerous different providers as potential competitors, including the following: CATV providers, CAPs, cellular providers, PCS providers, IXCs, electric utilities, government entities, nationwide retailers, ESMR providers, private microwave providers, and any other entity that has the funding to construct a private network.

Although they are identified separately by the Commission in Substantive Rule 23.61, non-voice data transmission service and dark fiber service are considered by most

of the industry as types of private line service. Dark fiber is fiber optic cable which is not lit, in other words, a fiber transmission facility sold without accompanying transmission service. In most cases the customer is expected to supply its own electronics and signals to the fiber. Non-voice data transmission service is a private line that transmits only data.

Revenues from dark fiber service decreased by 14.2 percent ($4,811,365 to $4,126,306) from year one to year two of the study period. Revenues from non-voice data communications service decreased by 4.5 percent ($6,246,290 to $5,962,346) from year one to year two of the study period.

DARK FIBER SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$3,017,974	$4,113,562	36.3%
Rural Counties	$0	$0	0.0%
Other Counties	$1,793,391	$12,744	(99.3%)
Total	$4,811,365	$4,126,306	(14.2%)

NON-VOICE DATA TRANSMISSION SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$3,432,484	$3,060,836	(10.8%)
Rural Counties	$142,096	$227,294	60.0%
Other Counties	$2,671,710	$2,674,216	0.1%
Total	$6,246,290	$5,962,346	(4.5%)

There are no residential customers for dark fiber service. The companies that report revenues for dark fiber service were unable to report a separate figure for the number of dark fiber customers. SWB notes on its questionnaire that it no longer provides dark fiber service. Residential customers for non-voice data transmission service decreased by 2.4 percent (1,032 to 1,007) from year one to year two of the study period, while business customers decreased by .4 percent (9,214 to 9,180).

NON-VOICE DATA TRANSMISSION SERVICE CUSTOMERS

I) Residential

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	402	370	(8.0%)
Rural Counties	35	52	49.3%
Other Counties	596	586	(1.7%)
Total	1,032	1,007	(2.4%)

II) Business

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	3,894	3,429	(11.9%)
Rural Counties	640	826	29.2%
Other Counties	4,681	4,925	5.2%
Total	9,214	9,180	(0.4%)

LECs list basically the same providers as competitors for dark fiber service and non-voice data transmission service as they do for private line service, including the following: CAPs, IXCs, electric utilities, CATV providers, private business networks, private radio networks, and microwave providers. Most companies provide no estimate as to the actual market share of competitors. Of those provided, estimates of competitors' market share of dark fiber service range from five to 100 percent and estimates of their share of non-voice data transmission service range from five to 60 percent.

LECs in all geographic areas list the same group of potential competitors for dark fiber service and non-voice data transmission service as they did for private line service.

One LEC, Poka-Lambro Rural Telephone Cooperative, lists barriers specific to providing dark fiber service and non-voice data transmission service. Poka-Lambro lists the cost of fiber deployment as an economic barrier to providing dark fiber service, and cites facility costs needed to provide the service as an economic barrier to providing non-voice data transmission service.

Cellular Mobile Interconnect Service

LECs charge cellular providers for the ability to interconnect calls from the cellular system to the public switched network operated by the LEC. While the Commission has no regulatory authority over cellular providers, it does regulate the cellular interconnection service.

Revenues from cellular mobile interconnect service increased by .2 percent ($33,033,393 to $33,103,628) from year one to year two of the study period.

CELLULAR MOBILE INTERCONNECT SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$3,760,440	$3,880,935	3.2%
Rural Counties	$497,133	$624,100	25.5%
Other Counties	$28,775,820	$28,598,593	(0.6%)
Total	$33,033,393	$33,103,628	0.2%

In general, two Federal Communications Commission (FCC)-licensed carriers provide cellular service in each Cellular Geographic Service Area (CGSA). Texas is divided into 47 CGSAs. Therefore, at any LEC switch there will be no more than two cellular interconnect customers.

Other Mobile Service (including paging)

LECs offer mobile telephone service, paging service, and radio common carrier service under tariff. There are many other providers of these services in Texas that are not regulated by the Commission.

Revenues from other mobile service increased by 9.1 percent ($483,529 to $527,300) from year one to year two of the study period.

OTHER MOBILE SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$182,560	$167,090	(8.5%)
Rural Counties	$119,658	$101,680	(15.0%)
Other Counties	$181,311	$258,530	42.6%
Total	$483,529	$527,300	9.1%

The number of residential customers of other mobile service decreased by 4.8 percent (105 to 100) from year one to year two of the study period, while the number of business customers decreased by 12.8 percent (758 to 661).

OTHER MOBILE SERVICE CUSTOMERS

I) Residential

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	0	0	
Rural Counties	103	98	(4.4%)
Other Counties	3	2	(20.0%)
Total	105	100	(4.8%)

II) Business

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	0	0	
Rural Counties	299	260	(13.2%)
Other Counties	459	401	(12.5%)
Total	758	661	(12.8%)

A number of LECs serving all geographic areas cite several providers as competitors for other mobile service, including the following: paging companies, radio common carrier providers, mobile telephone companies, cellular providers, electric utilities, private companies, and local governments. LEC estimates of competitors' market share for other mobile service range from five to 100 percent.

In response to the question asking them to identify and describe potential competitors, LECs in all geographic areas list numerous different providers of other mobile services, including the following: CATV providers, cellular providers, PCS

providers, private radio providers, satellite providers, electric utilities, ESMR providers, and private microwave providers.

LECs list licensing, frequency availability, and terrain as barriers to providing other mobile services.

Pay Telephones

LECs, as well as private pay telephone owners, provide pay telephone service. Phones operated by LECs are referred to as public or semi-public pay telephones. Phones operated by others are referred to as private pay telephones. Even though LECs do not operate private pay telephones, they receive revenue from providing local service access lines to such telephones.. Competition exists for the revenue generated by operating the phone.

Revenues from semi-public and public pay telephones increased by 1.8 percent ($123,134,540 to $125,363,039) from year one to year two of the study period. LEC revenues from providing the local service access line to a private pay telephone or customer-owned coin-operated telephone (COCOT) service increased by 56.5 percent ($16,309,276 to $25,507,624) from year one to year two of the study period. The county population group breakdown cannot be provided for pay telephone service revenues because several companies provided statewide totals only.

The number of semi-public and public pay telephone stations increased by 1.2 percent (113,855 to 115,199) from year one to year two of the study period, while private pay telephone stations increased by 27.6 percent (29,667 to 37,847). . The county population group breakdown cannot be provided for pay telephone service customers because several companies provided statewide totals only.

LECs serving all geographic areas believe that private pay telephone providers continue to capture an increasing share of the pay telephone market. LEC estimates of

private pay telephone owners' market share range from nine percent to 100 percent across different LEC serving areas in the state. Most LECs believe that this percentage has increased over the last two years as private pay telephone providers continue to target the high revenue generating phones.

In response to the question asking them to identify and describe potential competitors LECs in all geographic areas list the continued increase of pay phones operated by private pay telephone providers, as well as such other competitors as CAPs, CATV providers, cellular providers, and power utilities.

Only one LEC specifically identifies a barrier to providing pay telephone service. Its comments concern the limited market for such a service in many rural areas.

Central Office (C.O.)-Based PBX-Type Service (Centrex)

A private branch exchange (PBX) is a customer-owned switch used with a customer's wiring and telephone sets to provide communication within the customer's premises. Generally, the PBX owner must buy access lines from the LEC to complete other types of calls. In addition to intercom (intra-system) calling, a PBX can typically provide functions such as call forwarding, call hold, and conference calling. Centrex is a generic name for C.O.-based PBX-type services. C.O.-based PBX-type service refers to the use of the LEC's central office switch to provide communications within a customer's business as a substitute for customer premises equipment (CPE), such as a PBX or key system. These services provide the same functions that can be obtained from customer-owned equipment, such as a PBX, used in conjunction with LEC PBX trunk service.

Pursuant to PURA Section 18(e)(3)(B) LECs operating in Texas may request approval of customer-specific contracts for C.O.-based PBX-type services for contracts with 200 or more stations. In Docket No. 9960, the Commission approved customer-specific pricing for C.O.-based PBX-type services with between 75 and 200 stations. Applications for customer-specific contracts are reviewed pursuant to Substantive Rule

23.27, which sets forth the applicable approval standards. LECs filed 97 applications in fiscal year 1993 and 111 applications in fiscal year 1994.

Revenues from C.O.-based PBX-type service of 75 stations or more increased by 3.7 percent ($35,033,650 to $36,312,731) from year one to year two of the study period. Revenues from C.O.-based PBX-type service with fewer than 75 stations increased by 17 percent ($30,420,451 to $35,600,826) from year one to year two of the study period.

C.O.-BASED PBX-TYPE SERVICE OF 75 STATIONS OR MORE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$26,831,300	$25,935,408	(3.3%)
Rural Counties	$623,076	$984,135	57.9%
Other Counties	$7,579,274	$9,393,188	23.9%
Total	$35,033,650	$36,312,731	3.7%

C.O.-BASED PBX-TYPE SERVICE WITH FEWER THAN 75 STATIONS REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$23,268,989	$25,821,039	11.0%
Rural Counties	$1,112,048	$1,213,844	9.2%
Other Counties	$6,039,414	$8,565,943	41.8%
Total	$30,420,451	$35,600,826	17.0%

There are no residential customers for Centrex service. LECs' responses to the question on business customers are not consistent; therefore there are no reliable estimates for this category. Some LECs report customers as the number of Centrex access lines and others respond with the number of contracts or businesses that purchase the service.

Five LECs provide responses to the question asking them to identify and estimate the market share of competitors for C.O.-based PBX-type services. CPE providers in general and PBX vendors specifically are listed as competitors in today's marketplace. Only SWB provides an estimate of market share for PBX vendors, citing a 1989 study conducted for them by an outside research group stating that the market share of known PBX vendors that compete with its C.O.-based PBX-type service was over 90 percent.

SWB also states that the number of PBX vendors in Texas increased by 31 percent from 890 in 1990 to 1,166 in 1993.

LECs in all geographic areas list numerous different providers as potential competitors, including the following: CATV providers, CAPs, cellular providers, PCS providers, IXCs, electric utilities, government entities, and nationwide retailers.

Joint User Service

Joint user service is basic area service sold by LECs to entities such as shared tenant service (STS) providers, who then resell the service to end users. Such business is commonly referred to as Communications Services Management (CSM). Several varieties of CSM providers exist, including STS providers and Residential Multi-Tenant Service (RMTS) providers. Businesses or residents in a building served by a CSM provider may obtain telephone service from the CSM entity rather than obtaining distinctly separate telecommunications service directly from the LEC. Although the telephone company is still providing standard access lines to the building, fewer lines may be required. CSM providers do not compete with LECs to provide joint user service; they purchase joint user service from LECs, making them competitors with LECs to provide such other services as custom calling features, intraLATA toll, and basic area service.

Revenues from joint user service increased by 18.6 percent ($422,426 to $501,169) from year one to year two of the study period.

JOINT USER SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$365,315	$437,661	19.8%
Rural Counties	$3,171	$4,882	54.0%
Other Counties	$53,940	$58,626	8.7%
Total	$422,426	$501,169	18.6%

Residential customers might purchase services from companies that purchase joint user service from the LEC, but there are no residential customers for joint user services. Business customers for joint user service decreased by 2.3 percent (1,300 to 1,270) from year one to year two of the study period.

JOINT USER SERVICE CUSTOMERS

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	760	742	(2.4%)
Rural Counties	39	54	37.2%
Other Counties	501	475	(5.3%)
Total	1,300	1,270	(2.3%)

Only three LECs provide comments on current competitors of joint user services. In their comments they discuss CSM providers in detail. Both GTE-Contel and SWB comment on the substantial growth of CSM providers over the last few years. For example, GTE notes that CSM revenues have increased at an annual rate of 18 percent since 1988, and SWB notes that there are currently 197 STS and RMTS providers serving 242 locations in Texas.

Several LECs note that potential competitors for joint user service are similar to those companies that are potential competitors for basic area service, since the services are very similar. The list includes the following: CATV providers, CAPs, cellular providers, PCS providers, IXCs, electric utilities, government entities, nationwide retailers, and ESMR providers.

LECs cite the legal barrier of applying for and receiving approval of a tariff as the main barrier to providing joint user service.

Customized Service

Customized services, usually provided to large, sophisticated users, are specialized services that cannot be purchased out of an existing LEC tariff. Pursuant to PURA Section 18(e)(3)(B), LECs operating in Texas may request approval of customer-

specific contracts for customized services. Applications for customer-specific contracts are reviewed pursuant to Substantive Rule 23.27, which sets forth the applicable approval standards. LECs filed one application in fiscal year 1993 and six applications in fiscal year 1994.

Revenues from customized service increased by 2,104 percent ($96,745 to $2,132,380) from year one to year two of the study period.

CUSTOMIZED SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$61,649	$2,070,829	3259.1%
Rural Counties	$10,639	$13,148	23.6%
Other Counties	$24,457	$48,403	97.9%
Total	$96,745	$2,132,380	2104.1%

There are no residential customers for customized services. Business customers increased by 69.1 percent (1,080 to 1,826).

CUSTOMIZED SERVICE CUSTOMERS

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	913	1,642	79.9%
Rural Counties	111	116	4.1%
Other Counties	57	69	21.2%
Total	1,080	1,826	69.1%

LECs in all geographic areas list several providers as competitors for customized services, including IXCs, CAPs, satellite and radio communications companies. Estimates of competitors' total market share range from 27 percent to 100 percent.

LECs list numerous different providers as potential competitors for customized service, including the following: CAPs, CATV providers, IXCs, CPE providers, private radio networks, electric utilities, PCS providers, nationwide retailers, government entities, and private microwave systems.

Enhanced Services

The FCC considers a service to be enhanced if at least one of the following criteria is met: a) the service entails a substantial amount of data processing; b) the content of a communication message is altered or manipulated, even though the service is primarily communications in nature; or c) any portion of the communications is stored for a period longer than that incidental amount of time needed for its transmission, and the user is able to interact with the stored portion.[3] Examples of enhanced services are voice mail and messaging systems.

Revenues from enhanced service increased by 184 percent (1,655,634 to $4,733,699) from year one to year two of the study period.

ENHANCED SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$1,193,919	$4,154,248	248.0%
Rural Counties	$44,180	$49,877	12.9%
Other Counties	$427,535	$529,574	23.9%
Total	$1,665,634	$4,733,699	184.2%

Residential customers for enhanced service increased by 12.9 percent (37,561 to 42,390) from year one to year two of the study period, while business customers increased by 15.8 percent (4,193 to 4,854).

ENHANCED SERVICE CUSTOMERS

I) Residential

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	1,951	2,547	30.6%
Rural Counties	2,553	2,931	14.8%
Other Counties	33,058	36,913	11.7%
Total	37,561	42,390	12.9%

[3] *Trends in Telecommunications Policy*. September/October 1994. p. 11.

II) Business

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	679	877	29.2%
Rural Counties	341	422	23.9%
Other Counties	3,174	3,555	12.0%
Total	4,193	4,854	15.8%

LECs in all geographic areas list several providers as competitors for enhanced services, including the following: IXCs, CPE, voice-mail services, and radio and paging services. Very few LECs provide estimates of competitors' market share. Guadalupe Valley Telephone Cooperative estimates the market share of competitors in its service territory at 99 percent and Poka-Lambro Rural Telephone Cooperative estimates that competitors have 80 percent of the market in its serving area.

LECs list numerous different providers as potential competitors for enhanced service, including the following: CAPs, CATV providers, IXCs, CPE providers, private radio networks, electric utilities, PCS providers, nationwide retailers, government entities, private microwave systems, voice mail providers, and paging providers.

Custom Calling Features

Custom calling features are additional services offered with basic area service such as call waiting, call forwarding, and three-way calling.

Revenues from custom calling features increased by 3.6 percent ($226,203,682 to $234,349,593) from year one to year two of the study period.

CUSTOM CALLING SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$133,319,823	$151,474,816	13.6%
Rural Counties	$3,959,602	$5,665,303	43.1%
Other Counties	$88,924,257	$77,209,474	(13.2%)
Total	$226,203,682	$234,349,593	3.6%

LECs' responses to the question on custom calling customers are inconsistent; therefore there are no reliable estimates for this category. Some LECs list the number of customers and others provide the number of custom calling features.

LECs in all geographic areas list CPE providers, IXCs, and key system PBX providers as competitors for custom calling features. LEC estimates of competitors' market share range from 25 percent to 40 percent in some rural and other county markets.

LECs list numerous different providers as potential competitors for custom calling features, including the following: CAPs, CATV providers, IXCs, CPE providers, private radio networks, electric utilities, PCS providers, nationwide retailers, government entities, and key system providers.

Some LECs cite regulatory barriers to offering custom calling features, such as rate and tariff filings and privacy requirements. Others identify some economic and technical barriers, such as a lack of economies of scale, and limited access to the public network which prevent deployment, particularly for those companies serving rural counties.

Billing and Collection Service

Billing and collection service was detariffed on an interstate basis by the FCC in 1985. Pursuant to PURA Section 18(e)(3)(B) LECs operating in Texas may request approval of customer-specific contracts for billing and collection service. Such applications are reviewed pursuant to Substantive Rule 23.27, which sets forth the applicable approval standards. SWB filed five applications in fiscal year 1993 and nine applications in fiscal year 1994. No other LEC filed any applications.

Revenues from billing and collection service increased by 5.2 percent ($77,966,867 to $81,986,121) from year one to year two of the study period.

BILLING AND COLLECTION SERVICE REVENUES

All LECs	1992-93	1993-94	Percent Growth
Metro Counties	$64,198,151	$68,938,562	7.4%
Rural Counties	$3,903,263	$3,701,068	(5.2%)
Other Counties	$9,865,453	$9,346,492	(5.3%)
Total	$77,966,867	$81,986,121	5.2%

LECs in all geographic areas list IXCs, operator service providers, banking and credit card institutions, and other LECs as existing competitors for billing and collection service. Estimated market share of competitors range from 25 percent to 95 percent.

LECs list numerous different providers as potential competitors for billing and collection service, including the following: CAPs, CATV providers, IXCs, CPE providers, private radio networks, electric utilities, PCS providers, nationwide retailers, government entities, banking and credit card institutions, and any data processing vendors.

Some LECs cite privacy concerns as a legal barrier to offering billing and collection service. In addition, some LECs state that in general there are numerous technical difficulties in setting up an effective billing and collection system.

Access Services

LECs offer access service to IXCs that require connections to the local exchange network to provide long distance service. There are two major kinds of access service offered by LECs: switched access and special access. Switched access service allows connection of IXCs to the local exchange switched network for the origination and termination of long-distance calls. Special access service consists of point-to-point circuits that are leased to connect the customer's premises with an IXC.

Switched Access

LEC revenues for switched access are divided into four categories: end user revenue, carrier common line revenue, local switching revenue, and local transport

revenue. Revenues from switched access service increased by 8.9 percent ($1,884,750,529 to $2,052,233,727) from year one to year two of the study period.

SWITCHED ACCESS (AGGREGATE)

i) Interstate Revenues

	1992-93	1993-94	Percent Growth
End User			
Metro Counties	$223,210,615	$255,822,867	14.6%
Rural Counties	$26,229,713	$32,678,349	24.6%
Other Counties	$143,620,241	$168,023,327	17.0%
Total	$393,060,569	$456,524,543	16.1%
Carrier Common Line			
Metro Counties	$97,066,067	$129,943,030	33.9%
Rural Counties	$12,321,099	$21,097,644	71.2%
Other Counties	$146,632,168	$95,662,254	(34.8%)
Total	$256,019,334	$246,702,928	(3.6%)
Local Switching			
Metro Counties	$112,586,686	$116,765,377	3.7%
Rural Counties	$17,362,335	$21,260,631	22.5%
Other Counties	$84,511,711	$87,094,879	3.1%
Total	$214,460,732	$225,120,887	5.0%
Local Transport			
Metro Counties	$97,995,156	$96,595,113	(1.4%)
Rural Counties	$17,237,522	$18,345,087	6.4%
Other Counties	$92,480,478	$134,058,233	45.0%
Total	$207,713,156	$248,998,433	19.9%
Other Switched Access			
Metro Counties	$0	$0	0.0%
Rural Counties	$0	$0	0.0%
Other Counties	$1,500	$1,281	(14.6%)
Total	$1,500	$1,281	(14.6%)
Total Interstate Access			
Metro Counties	$530,858,524	$599,126,387	12.9%
Rural Counties	$73,150,668	$93,381,711	27.7%
Other Counties	$467,246,099	$484,839,974	3.8%
Total	$1,071,255,291	$1,177,348,072	9.9%

ii) Intrastate Revenues

	1992-93	1993-94	Percent Growth
End User			
Metro Counties	$3,632	$4,760	31.1%
Rural Counties	$77,302	$70,854	(8.3%)
Other Counties	$1,667	$2,324	39.4%
Total	$82,601	$77,938	(5.6%)
Carrier Common Line			
Metro Counties	$244,336,257	$254,732,634	4.3%
Rural Counties	$37,732,016	$52,093,441	38.1%
Other Counties	$219,116,100	$255,780,299	16.7%
Total	$501,184,372	$562,606,374	12.3%
Local Switching			
Metro Counties	$82,089,524	$73,719,788	(10.2%)
Rural Counties	$15,962,878	$18,959,033	18.8%
Other Counties	$88,240,495	$83,069,264	(5.9%)
Total	$186,292,898	$175,748,085	(5.7%)
Local Transport			
Metro Counties	$49,212,827	$48,585,501	(1.3%)
Rural Counties	$10,827,135	$15,159,409	40.0%
Other Counties	$65,867,713	$72,690,470	10.4%
Total	$125,907,676	$136,435,381	8.4%
Other Switched Access			
Metro Counties	$0	$0	0.0%
Rural Counties	$0	$0	0.0%
Other Counties	$27,692	$17,876	(35.4%)
Total	$27,692	$17,876	(35.4%)
Total Intrastate Access			
Metro Counties	$375,642,240	$377,042,683	0.4%
Rural Counties	$64,599,331	$86,282,737	33.6%
Other Counties	$373,253,667	$411,560,234	10.3%
Total	$813,495,238	$874,885,655	7.5%

iii) Combined Access

	1992-93	1993-94	Percent Growth
End User			
Metro Counties	$223,214,247	$255,827,627	14.6%
Rural Counties	$26,307,015	$32,749,203	24.5%
Other Counties	$143,621,908	$168,025,651	17.0%
Total	$393,143,170	$456,602,481	16.1%
Carrier Common Line			
Metro Counties	$341,402,324	$384,675,664	12.7%
Rural Counties	$50,053,115	$73,191,085	46.2%
Other Counties	$365,748,268	$351,442,554	(3.9%)
Total	$757,203,706	$809,309,303	6.9%
Local Switching			
Metro Counties	$194,676,210	$190,485,165	(2.2%)
Rural Counties	$33,325,213	$40,219,664	20.7%
Other Counties	$172,752,207	$170,164,143	(1.5%)
Total	$400,753,629	$400,868,972	0.0%
Local Transport			
Metro Counties	$147,207,983	$145,180,614	(1.4%)
Rural Counties	$28,064,657	$33,504,497	19.4%
Other Counties	$158,348,192	$206,748,703	30.6%
Total	$333,620,832	$385,433,814	15.5%
Other Switched Access			
Metro Counties	$0	$0	0.0%
Rural Counties	$0	$0	0.0%
Other Counties	$29,192	$19,157	(34.4%)
Total	$29,192	$19,157	(34.4%)
Total Access			
Metro Counties	$906,500,764	$976,169,070	7.7%
Rural Counties	$137,749,999	$179,664,448	30.4%
Other Counties	$840,499,766	$896,400,208	6.7%
Total	$1,884,750,529	$2,052,233,727	8.9%

LECs in all geographic areas list IXCs and entities with private networks, such as electric utilities, hospitals, and large manufacturing facilities as existing competitors for switched access service.

LECs list numerous providers as potential competitors for switched access service, including the following: CATV providers, IXCs, CAPs, PCS providers, electric utilities, nationwide retailers, government entities, satellite providers, and major television networks.

High transport costs, particularly in rural areas, and the cost of interconnection are identified as economic barriers to providing switched access service.

Special Access

Revenues from special access service increased by 9.8 percent ($248,042,621 to $272,356,809) from year one to year two of the study period.

SPECIAL ACCESS REVENUES

Interstate	1992-93	1993-94	Percent Growth
Metro Counties	$128,138,475	$140,339,818	9.5%
Rural Counties	$4,845,208	$7,730,802	59.6%
Other Counties	$69,812,477	$79,532,095	13.9%
Total	$202,796,161	$227,602,716	12.2%

Intrastate	1992-93	1993-94	Percent Growth
Metro Counties	$22,743,365	$22,325,738	(1.8%)
Rural Counties	$4,511,628	$5,583,756	23.8%
Other Counties	$17,991,467	$16,844,599	(6.4%)
Total	$45,246,460	$44,754,093	(1.1%)

Combined	1992-93	1993-94	Percent Growth
Metro Counties	$150,881,840	$162,665,556	7.8%
Rural Counties	$9,356,836	$13,314,559	42.3%
Other Counties	$87,803,944	$96,376,694	9.8%
Total	$248,042,621	$272,356,809	9.8%

LECs in all geographic areas list IXCs, private networks, cellular providers, pay telephone providers, and satellite and radio providers as existing competitors for special access service. Estimates ranging from 20 percent to 100 percent are provided for the market share of competitors in rural counties.

LECs list numerous providers as potential competitors for special access service, including the following: CATV providers, IXCs, CAPs, PCS providers, cellular providers, electric utilities, nationwide retailers, government entities, satellite providers, and major television networks.

High transport costs, particularly in rural areas, and the cost of interconnection are identified as economic barriers to providing special access service.

CURRENT AND FUTURE COMPETITORS

Competitive Access Providers (CAPs)

Today CAPs typically provide dedicated connections between end-users and interexchange carriers (IXCs). The services they offer usually include private line service, special access service, dark fiber service, and non-voice data transmission service, all of which have been deemed competitive exchange services by the Commission. In most cases, CAPs provide service to high-volume users, who tend to be located in metropolitan areas. As of June 30, 1994 there were nine CAPs registered at the Commission providing service in Texas:

Access Transmission Services, Inc.
FIBRCOM Incorporated
Metropolitan Fiber Systems (MFS)of Dallas
Metropolitan Fiber Systems (MFS) of Houston
Phonoscope, Inc.
Teleport Communications Group of Dallas
Teleport Communications Group of Houston
Time Warner Communications of Austin
Time Warner Communications of Houston

On June 29, 1994 the Commission staff, seeking detailed information on revenues and customers by type of service and geographic region, sent a questionnaire, the Competitive Exchange Service Provider Data Report (Exhibit VI), to CAPs registered to provide service in Texas. On the questionnaire, eight companies indicate that they offer private line service; one offers C.O. based PBX-type service of 75 stations or more; seven offer special access service; six offer dark fiber service; three offer non-voice data

transmission service; and one resells or shares local exchange service. However, the companies report revenues and customers for only private line service, special access service, and dark fiber service.

Overall CAP revenue from providing these services increased by 97.5 percent ($3,687,818 to $7,284,882) from year one to year two of the study period. The revenue was generated exclusively in metro counties. Revenue growth varied by service. Private line revenues increased by 140 percent ($1,397,240 to $3,349,119), special access increased by 163 percent ($782,912 to $2,062,312) and dark fiber revenue increased by 20 percent ($1,503,876 to $1,806,432).

COMPETITIVE ACCESS PROVIDERS: REVENUES

Intrastate	1992-93	1993-94	Percent Growth
Private Line	$1,397,240	$3,347,119	139.6%
Dark Fiber	$653,502	$564,597	(13.6%)
Special Access	$762,667	$1,705,824	123.7%
Other Misc.	$0	$0	0.0%
Total	$2,813,409	$5,617,540	99.7%

Interstate	1992-93	1993-94	Percent Growth
Private Line	$0	$2,000	-
Dark Fiber	$850,374	$1,241,835	46.0%
Special Access	$20,245	$356,488	1660.9%
Other Misc.	$3,791	$67,019	1667.8%
Total	$874,410	$1,667,342	90.7%

Combined	1992-93	1993-94	Percent Growth
Private Line	$1,397,240	$3,349,119	139.7%
Dark Fiber	$1,503,876	$1,806,432	20.1%
Special Access	$782,912	$2,062,312	163.4%
Other Misc.	$3,791	$67,019	1667.8%
Total	$3,687,819	$7,284,882	97.5%

In spite of the increase over the last two years, CAP revenues are still far lower than LEC revenues for the services listed above. When LEC revenues are considered across all geographic regions of the state, their revenues are 28 times greater than CAPs' for private line service (intrastate), 26 times greater for special access (intrastate), and 7

times greater for dark fiber service (intrastate). Even when LEC revenues only in metro counties are compared to CAP revenues, LEC revenues are still significantly greater, by 17 times for private line (intrastate), 13 times for special access (intrastate), and 7 times for dark fiber (intrastate).

As expected, the number of CAP customers also increased. CAPs report that they had only business customers, all residing in metro counties. Overall, business customers increased by 186 percent (112 to 320). Specifically, customers increased by 329 percent (46 to 195) for private line service, increased by 137 percent (37 to 87) for special access service, and remained constant (29) for dark fiber service.

COMPETITIVE ACCESS PROVIDERS: CUSTOMERS

Customers	1992-93	1993-94	Percent Growth
Private Line	46	195	328.6%
Dark Fiber	29	29	0.0%
Special Access	37	87	137.0%
Other Misc.	2	10	566.7%
Total	112	320	185.7%

While the data described above show that the CAPs provide a limited number of services over a limited area in Texas today, there is evidence that they plan to expand their scope of services and increase the size of their networks in the future. This year both MFS-Intelenet of Texas (MFSI), in Docket No. 13282, and Teleport, in Docket No. 13655, applied for Certificates of Convenience and Necessity (CCN) to supply local exchange service in the major metropolitan markets of Texas. (See the discussion in Commission Actions at the end of this section for additional information on these cases.) MFSI and Teleport have received approval to supply local exchange service in such other states as Illinois, New York, Maryland, Massachusetts, Michigan and Washington. Both companies, as well as other CAPs, continue to expand into new cities across the country and increase the size of their networks in the cities where they currently provide service.

CAPs indicate that they currently face several legal, technical, and economic barriers to entry to providing local exchange services, including the following: obtaining rights-of-way; interconnection arrangements to LECs' networks; access and conduit space in commercial and residential property; number portability; and general regulatory requirements, such as obtaining a CCN. To overcome these barriers the CAPs often have to deal with at least four different entities: they must be granted a right-of-way by the local government to construct their network; they need to reach an agreement with building owners for entrance and conduit space, which agreement often requires a monetary payment not faced by the LEC; they have to make arrangement with the incumbent LEC to interconnect to the local network at reasonable prices and work out number portability arrangements; and they must work with state regulators to obtain certification.

Cable Television Providers

Cable television systems currently do not directly compete with most telecommunications services offered by LECs, other than by providing what are currently deemed competitive exchange services through associations with CAPs and other providers. Cable television providers may represent the most significant source of potential competition for telecommunications services because of the extent of their networks.

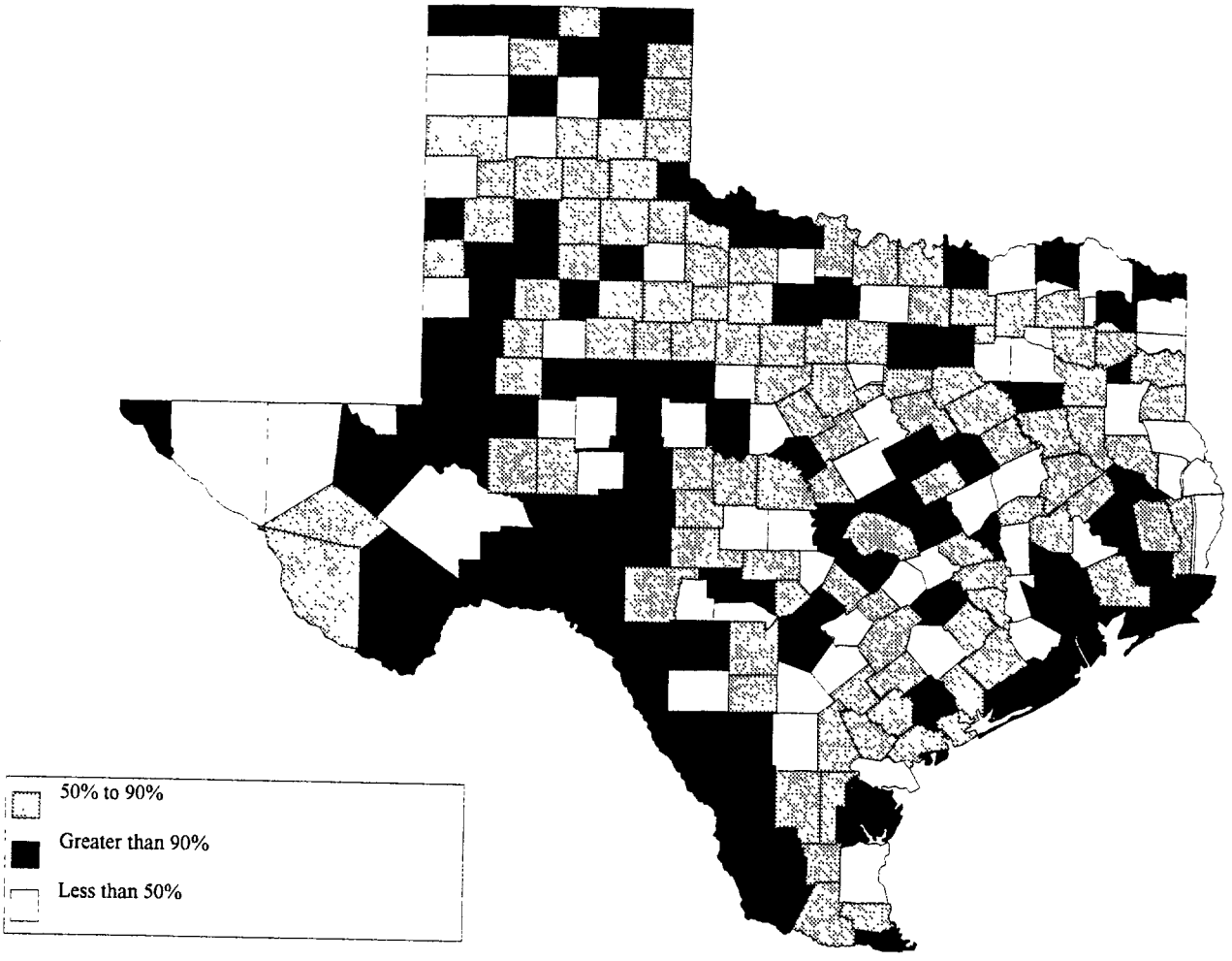
Many large cable television companies have affiliations with CAPs, who as described earlier, currently compete with LECs in the provision of private line type services. Tele-Communications, Inc.'s (TCI) affiliation with Teleport of Houston and Dallas and Time Warner's affiliation with Time Warner of Austin and Houston are examples of such associations. In addition, SWB has identified KBL Integrated Services, a subsidiary of Paragon Cable, as a provider of residential multi-tenant service (RMTS) in San Antonio. As described earlier, RMTS is an arrangement in which basic area service is resold to large apartment or living complexes, subject to the LECs' joint user service tariffs.

While cable television systems cover a significant portion of Texas, they do not currently pass as many homes as LECs, particularly in the rural areas. Currently in Texas there are 109 cable television companies with 2,963,099 subscribers and networks that pass approximately 5,902,220 housing units, or 81 percent of all housing units in the state.[4] However, the percentage of housing units passed by cable systems varies significantly across different areas of the state. In metro counties approximately 94 percent of housing units are passed by cable, whereas only approximately 53 percent of housing units in rural areas and approximately 72 percent in other counties are passed by cable. The figure "Housing Units Passed by Cable" provides an overview of the percentage of housing units passed by cable for each county in Texas. Therefore, while current systems cover enough homes in urban areas to offer a competitive threat to LECs, it is unclear whether the systems pass enough homes in rural portions of Texas to offer a viable competitive option in those areas.

Notwithstanding questions about the ubiquity of cable television systems, there are still some economic, technical and legal barriers that cable television providers must surmount before they can offer local exchange telephone services that will compete with those of LECs. Significant infrastructure enhancements still must be made to the cable television network before it can provide telephone service. Most notably, investment is needed to transform its tree-and-branch architecture to the hub-and-spoke design used in telephone and to acquire switching equipment. In addition, providing a dependable

[4] The 81 percent figure was estimated using several sources and assumptions. First, information from the *Television & Cable Factbook* (Warren Publishing, Vol. 62, 1994 Edition) provided figures for the number of housing units passed by cable (the number of homes, apartments, etc. passed by cable whether occupied or not) by community in Texas as of the end of 1993. For some communities the cable company did not report a homes-passed figure, but did report a subscriber figure. In these cases the subscriber figure was used as a lower-bound estimate of homes passed. A statewide figure of 5,902,220 was derived by summing the homes-passed figures for the individual communities, and figures for individual counties were derived by summing across communities in the county. Overall housing units (used in the denominator for the 81% figure) were derived from the 1990 Census (*Summary Social, Economic, and Housing Characteristics*, Table 11, Structural, Plumbing, and Equipment Characteristics). In order to account for some of the growth in housing units from 1990 to 1993, the 1990 Census figures for housing units were multiplied by the population growth rate from 1990 to 1992. Population estimates were the only county-level figures available that could be used as a proxy for housing unit growth. Unfortunately, these figures were only available at the county level for 1992, not 1993. Therefore, assuming that the number of housing units grew from 1992 to 1993, the estimates of the percentage of housing units passed by cable, both aggregate and for different county population groups, are slightly inflated.

Housing Units
Passed By Cable



telephone network will require the upgrading of support systems to provide such essential tasks as network monitoring.

Cable television companies are excluded by PURA from the definition of public utilities. They are regulated by FCC rules established by the Cable Television Consumer Protection and Competition Act of 1992. However, if a cable television company wants to supply local telephone service it must obtain a CCN from the Commission before any services can be provided.

Wireless Communications Providers

There are several wireless communication service providers, some of which currently compete or have the potential to compete with local exchange services offered by LECs. These services include cellular service, paging services, specialized mobile radio service, and personal communications service.

Cellular Carriers

The Commission does not regulate the rates charged by cellular providers, nor does it require them to obtain a certificate or register. The cellular telephone market in Texas is divided into 47 Cellular Geographic Service Areas (CGSAs), 26 Metropolitan Statistical Areas (MSAs) and 21 Rural Statistical Areas (RSAs). In general, two FCC-licensed carriers provide cellular service in each CGSA; typically one is an affiliate of the wire-line telephone company, while the other is a non-wire-line company.

There is very little state-specific data available on the cellular industry. National data show that cellular revenues and subscribership continue to increase at a substantial rate. Cellular revenues increased from $4,548 million in 1990 to $10,892 million in 1993, an increase of approximately 140 percent.[5] Cellular subscribership increased from 3,508,944 customers in December of 1990 to 16,009,461 customers in December of

[5] Cellular Telecommunications Industry Association.

1993, an increase of approximately 356 percent.[6] Interestingly, the two cellular companies serving the highest percentage of potential users in the state, Southwestern Bell Mobile Systems (35 percent of potential users) and GTE Mobilnet (29 percent of potential users) are affiliated with the two largest LECs in Texas.

Although the cellular market continues to grow, there is little evidence that it is replacing basic area service provided by LECs. In fact, some experts suggest that cellular offers limited competition to land-line service. For example, Jerry Hausman, Professor of Economics at MIT and a noted expert in telephone demand issues, notes that "competition between land-line and cellular now, and for the foreseeable future, will be limited by price differences and by limited cellular capacity."[7] Discussion of cellular providers' impact on intraLATA toll will be discussed in the intraLATA long-distance section of the report.

There are legal and economic barriers to entry to providing cellular telephone service. Initially a company must obtain a license to provide service in a particular area from the FCC. Also, developing the cellular system infrastructure can be a costly investment: a single cell site can cost $500,000 to $750,000.

Paging Service Providers

Paging services include tone-only, tone-and-voice, alphanumerics, voice messaging, and data services. Tone-only service provides the caller the ability to cause a tone or beep to be heard or a vibration to be felt by the called party. Tone-and-voice service permits the caller to leave a short message. Alphanumerics, voice messaging, and data services are much more sophisticated in the services offered and the terminal equipment required. Newer features include two-way communications, message storage capabilities, and larger displays of information at the terminal equipment.

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[6] Cellular Telecommunications Industry Association.

[7] Affidavit of Jerry A. Hausman, *United States of America vs. Western Electric Company, Inc. and American Telephone and Telegraph Company.* United States District Court For District of Columbia, Civil Action No. 82-1092, p. 3.

As mentioned above, the rates of paging services offered by LECs are regulated. Paging services provided by non-wire-line companies are not regulated. Therefore in the provision of paging services LECs face competition from providers not subject to the same regulatory burden LECs face. No information exists on the revenues or the number of customers that these companies generate from providing paging services in Texas.

Competition for providing paging services is evident, with numerous different providers across the state. LECs argue that, in addition to providing competition within the paging industry, some of the newer features such as two-way service and message storage capability make companies offering paging service current and future competitors with LECs for local and intraLATA toll services.

Currently, there do not appear to be any significant barriers to providing paging services for non-LEC companies. As mentioned previously, a LEC must file a tariff in order to provide paging services.

Specialized Mobile Radio Service (SMR) Providers

An SMR provider operates a radio system that includes one or more base station transmitters, one or more antennas, and other radio equipment that a third party may use for dispatch or interconnection service to the public switched telephone network. Enhanced SMR (ESMR) has been developed recently, increasing the coverage area and roaming capability beyond what was previously available with SMR. SMR and ESMR providers are not regulated in Texas.

SMR is a competitive alternative to mobile telephone service and cellular service. Other than the initial start-up investment cost, there do not appear to be any significant barriers to providing SMR or ESMR service.

Personal Communication Service (PCS) Providers

PCS is a service that will be offered in the future, when communication will no longer be tied to a physical location; rather, calls will be made to a person. As currently envisioned, the PCS system will issue to a person a single number that will follow him or her constantly.

Since they are not yet operational, PCS providers offer no current competition to any other telecommunications providers. However, in the future, in addition to competing among themselves, PCS providers will potentially be offering services that will compete with local exchange services, public telephones, and cellular and other wireless services. How quickly PCS becomes a competitive option to local exchange services and cellular services depends primarily upon the price and quality of service.

There are three main barriers to providing PCS service: spectrum allocation, numbering plan constraints, and costs of entry. As with cellular service, PCS providers obtain a license from the FCC, a process that can become quite costly, depending on bidding. In the summer of 1994 the FCC auctioned narrowband PCS licenses across the country. In December of 1994 the FCC held an auction for broadband PCS licenses. The number portability PCS envisions is incompatible with the geographically based North American Numbering Plan (NANP). If PCS is allowed in such a way that communication is no longer tied to a physical location, both LECs and IXCs will have to modify their switches to route calls correctly. Wireless technologies like PCS rely on a significant amount of equipment that cannot be re-deployed for other applications, potentially leading to stranded investment.

Electric Utilities

Electric utilities are also considered potential competitors in telecommunications markets. The high penetration rate for electric utility service (96.5 percent of Texas households in 1992) provides an avenue to offer services to everyone across the state.

Although electric utilities are generally considered as potential competitors, there are examples of the planned or already-existing provision of fiber capacity or actual telecommunications services by electric utilities. A few of these cases ultimately may involve retail local telephone-service provision. (One that already does is in Glasgow, Kentucky, where the municipally owned electric utility offers local telephone service, data transmission, and cable TV over its broadband network.) They may involve the construction of fiber networks, in cooperation with LECs or in competition with them. Most often they involve the leasing of fiber or coaxial cable capacity to public or private entities. For example, Houston Lighting & Power Co. (HL&P) leases fiber capacity to MFS and Teleport in Houston. In central Texas the Lower Colorado River Authority (LCRA) is installing fiber-optic cable for its own purposes, but may lease excess capacity to public entities for telemedicine or distance-learning projects. (As a quasi-public organization, the LCRA is restricted by law to providing services only to public entities.)

The main reason many electric utilities are becoming interested in leasing cable capacity to other entities, and perhaps in other telecommunications applications, results from the utilities' need to engage in "demand-side management" (DSM). Advanced DSM involves the continuous monitoring of system demands and supplies and the sophisticated communication to consumers of important information, as with time-varying electricity pricing, or the sending of signals that may turn off certain appliances in emergencies or times of peak demand. These tasks require great information-transfer capacity, which fiber-optic cable can provide. In some cases the utility finds it cost-effective to lease such capacity from another entity (often an LEC), whereas in others it finds it cost-effective to build its own network links. In these latter cases the electric utility is likely to have excess capacity, which it may decide to lease.

Other Miscellaneous Providers

There are several other telecommunications providers that are current and potential competitors for the provision of local services. These include: private pay telephone providers (which compete for pay telephone revenues), IXCs (which compete

for special access revenues), STS providers (which compete for basic local revenues), PBX and key system providers (which compete for Centrex revenues), and voice mail and messaging service providers (which compete for enhanced service revenues). While each is a competitor, it is difficult to collect sufficiently reliable information on subscribership and revenues of these providers to accurately portray the extent to which each one poses a competitive threat to the LECs.

IMPACT OF COMPETITION ON RURAL AREAS

Currently there is little evidence of competition for the provision of most local telephone services in rural Texas. LECs supply the majority of all services. Evaluation of potential competition suggests that LECs will continue to have a similar degree of dominance in the near future.

Except for the "other mobile service" category, LEC revenues from rural counties constitute less than 10 percent of their total revenues across all service categories. In general, since it represents such a small percentage of total revenues, competitors for most services have little incentive to provide services to rural Texas at this time. This is especially true given that the cost of providing service is more expensive in rural areas because of low population densities.

PERCENTAGE OF LEC REVENUES FROM RURAL COUNTIES BY TYPE OF SERVICE

TYPE OF SERVICE	PERCENTAGE OF REVENUES FROM RURAL COUNTIES
Basic Area Service	6%
Extended Area Service	7%
Private Line Service	7%
Dark Fiber Service	0%
Non-Voice Data Transmission Service	4%
Cellular Mobile Interconnect Service	2%
Other Mobile Service	20%
Public and Semi-Public Pay Telephone Service	1%
Private Pay Telephone Service	6%
C.O. Based PBX-Type Service of 75 Stations or More	3%
C.O.-Based PBX-Type Service less than 75 Stations	3%
Joint User Service	1%
Customized Service	1%
Enhanced Service	1%
Custom Calling Features	2%
Billing and Collection Service	5%
Switched Access Service	9%
Special Access Service	3%

Information collected from what are thought to be two of the main competitive threats to LECs, CAPs and CATV providers, provides further evidence of a lack of current and potential competition in rural areas. Currently no CAPs provide competitive exchange services in rural communities. Additionally, MFSI and Teleport have not requested authorization to provide service to rural areas in their petitions for CCNs.

Although they have a significant presence, CATV companies pass only about 53 percent of the housing units in rural counties. Therefore, even if CATV companies started providing telephone service tomorrow, their infrastructure would reach only half of all the housing units in rural communities across the state.

Wireless providers do have a significant presence in rural communities but are not currently a viable competitor to the LECs for the provision of POTS. The services they offer today cannot be easily substituted for POTS due to price and service quality limitations. However, in rural communities, wireless providers do compete with LECs' tariffed mobile services such as paging and mobile radio services.

While providing no current competition in rural areas, electric utilities have the potential to compete with LECs for the provision of basic telephone service because they serve almost all areas of the state.

COMMISSION ACTIONS

EXPANDED INTERCONNECTION

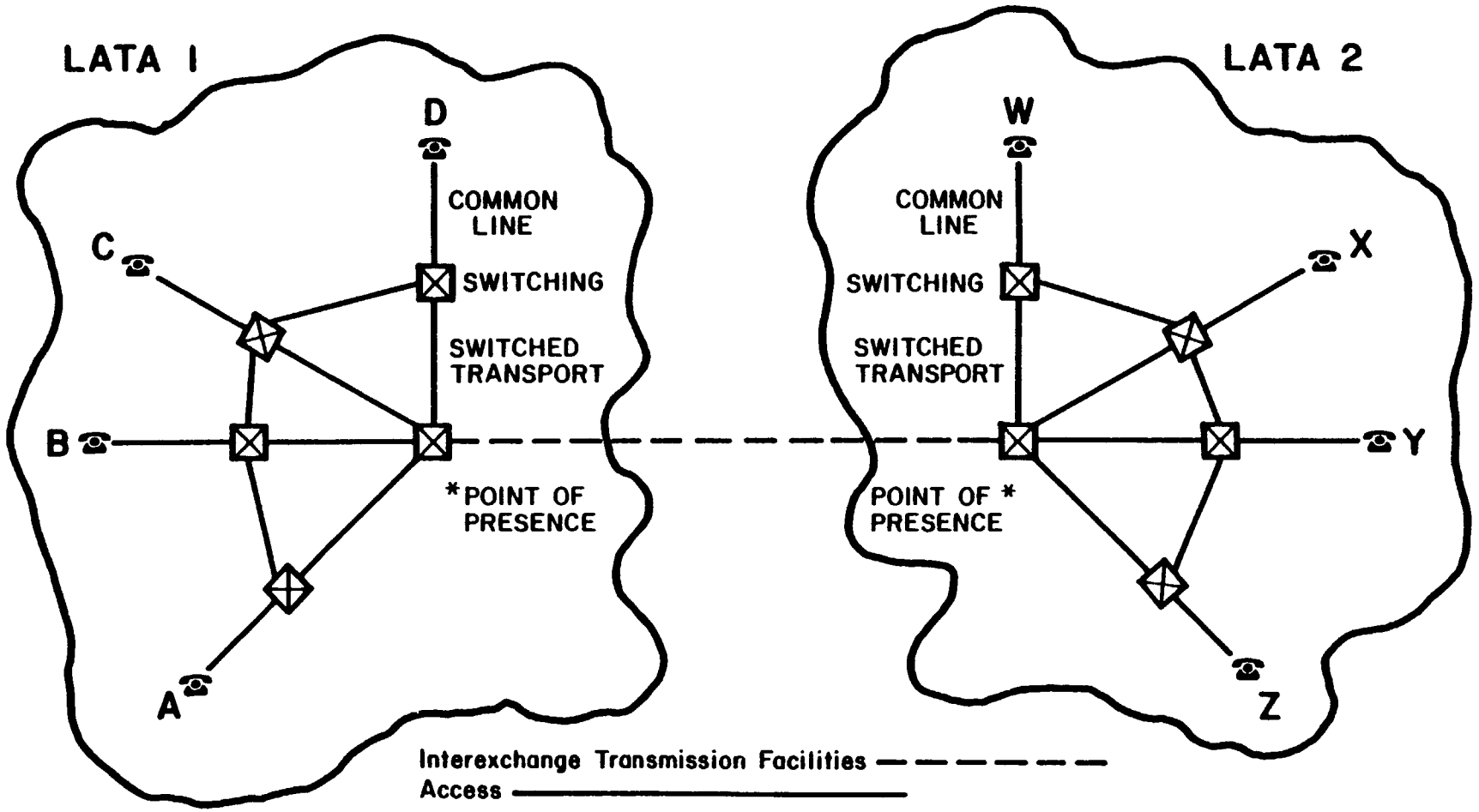
Interconnection is a general term for the connection between a LEC's network and that of another telecommunications provider, such as a competitive access provider (CAP) or interexchange carrier (IXC).

The most common type of interconnection is access service. Access services are a set of tariffed services offered by LECs that allow IXCs and other providers access to the LEC's customers. The most common use of access services is to complete long-distance calls to and from LEC customers. IXCs, in fact, are the LECs' biggest customers. Access services represented 21 percent of LEC revenues in 1993.

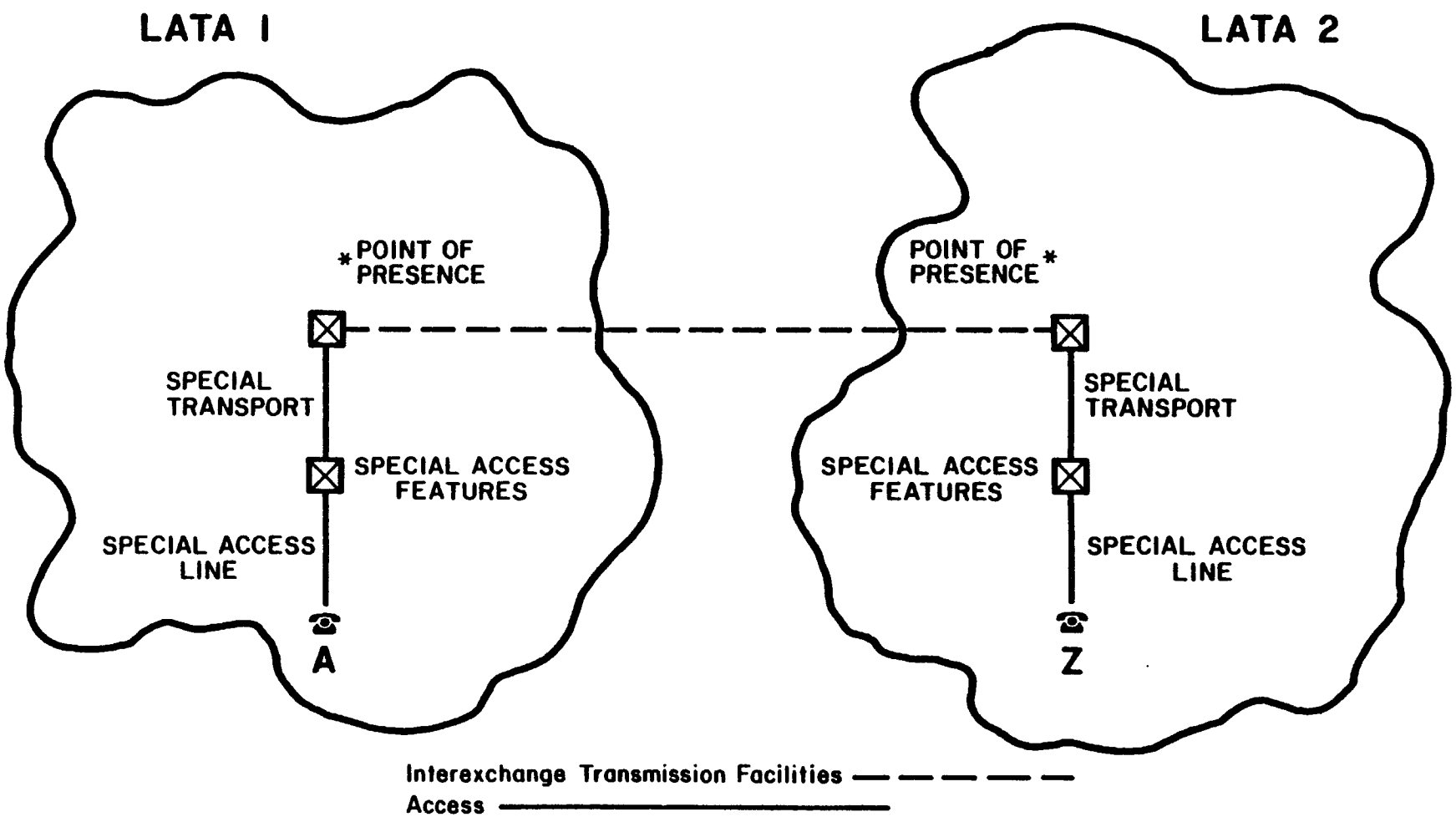
Access service can be switched or dedicated. Switched access services are provided over the public switched network. This arrangement is illustrated in the diagram "Switched Public Network." In Texas the rates for intrastate switched access are considerably higher than the national average. In 1994 the Commission staff calculated a weighted-average Texas intrastate access charge and found it to be 61 percent higher than the national average. Since access charges are the biggest cost of long-distance carriers, Texas' high intrastate access charges explain why long-distance calling within the state often costs more than interstate calling.

Dedicated access services provided by a LEC are called special access. Special access, illustrated in the diagram "Special Access," is a private-line service that typically connects customers with high volumes of long-distance traffic directly to an IXC's network.

SWITCHED PUBLIC NETWORK



SPECIAL ACCESS



In 1992 the FCC ordered large LECs (in Texas, the order applied to GTE and SWB) to provide *expanded interconnection* for interstate special access. In August 1993 the FCC adopted rules for expanded interconnection for interstate switched access. The FCC orders required the LEC to permit physical collocation of the customer's equipment in the LEC's central office. This arrangement permits competitors, using the LEC's network, to aggregate at the LEC's central office traffic from widely dispersed customers. The CAP or IXC may then carry the traffic on its own network to an IXC's point of presence (POP) or a large customer's premises. The process will also flow in reverse. The FCC's order for expanded interconnection for switched transport required the large LECs to (i) provide expanded interconnection for interstate switched transport services and (ii) permit interconnectors to terminate their own switched access transmission facilities at LEC locations, including central offices.

In June 1994 a federal court overturned the orders' physical collocation requirements as an unconstitutional taking of LEC property. The FCC issued an order in July 1994 requiring LECs to offer expanded interconnection through virtual collocation arrangements. A LEC is exempt from the mandatory virtual collocation requirement if it voluntarily provides expanded interconnection through physical collocation arrangements.

In February 1994 the Commission adopted a rule requiring LECs that have interstate expanded interconnection tariffs in effect to file Texas tariffs to provide for expanded interconnection for intrastate special access services and private line services. In November 1994 the new rule was amended to provide for expanded interconnection for intrastate switched transport service.

The Commission's Substantive Rule 23.92 requires each affected LEC to offer intrastate expanded interconnection at the same locations, in the same manner, and, except for price, under the same terms and conditions as it offers interstate expanded interconnection.

APPLICATIONS OF MFS INTELENET AND TELEPORT FOR CCNs

To provide local exchange service in Texas, which includes switched service within an exchange, a carrier must have a Certificate of Convenience and Necessity (CCN) from the Commission. In Texas 61 LECs have CCNs to provide local service, and with rare exceptions their service territories do not overlap, so the certified carriers do not compete with each other.

On July 29, 1994 MFS Intelenet of Texas (MFSI), a sister company of the CAP Metropolitan Fiber Systems, applied for a CCN to operate as a LEC within exchange areas served by SWB and GTE in seven urban counties (Bexar, Collin, Dallas, El Paso, Harris, Tarrant and Travis). In its petition MFSI asserted that PURA "contemplates equality between dually-certificated utilities. . .[and] that additional LECs are to be integrated seamlessly into the State's telecommunications network."

The MFSI petition was docketed (Docket No. 13282). In November 1994 the judge presiding over the case ordered that the proceeding will include any relevant CCN issues and co-carrier arrangement issues; issues related to unbundling of the local loop, which were brought up in the original petition, have been severed from the case. A hearing is set for April 1995.

Also in November 1994, two other CAPs, Teleport Communications Dallas and Teleport Communications Houston, filed a similar petition seeking a CCN to serve areas served by SWB and GTE in eight urban counties (Harris, Galveston, Montgomery, Brazoria, Dallas, Tarrant, Collin and Denton). That case has been assigned Docket No. 13655. A hearing is expected in 1995.

In addition to the issues raised in the MFSI application, Teleport has also requested pricing flexibility pursuant to PURA Section 18(e)(3).

DEFINITION OF LOCAL EXCHANGE SERVICE

Under PURA the provision of local exchange service is one means by which a telecommunications utility is determined to be a dominant carrier. One implication of the determination is that the utility's rates are subject to Commission approval. Therefore, the Commission's definition of local exchange service has a significant impact on the regulatory treatment of carriers providing services in the local exchange, and thus on the development of local telecommunications competition.

In October 1992 the Commission amended its rules to redefine local exchange service. The amendment defines local exchange service very broadly as telecommunications service provided within an exchange; however, nine categories of services, called competitive exchange services, are excepted from the definition.

The practical effect of excepting certain services from the definition of local exchange service is to open these local services to competition. A telecommunications utility that provides only these competitive exchange services is not providing local exchange service and is therefore not subject to certification as a dominant carrier. Competitive exchange services include: services for which LECs have been granted authority to engage in pricing flexibility; private line services; some resale or sharing of local exchange service; dark (unpowered) fiber services; non-voice data transmission services; dedicated and virtually dedicated access services; any service initially provided within an exchange, if first provided by an entity other than a LEC; and any service that the Commission determines by final order in a docketed proceeding is not local exchange service.

Also in October 1992, the Commission adopted an important revision to its rule regarding Rate-Setting Flexibility for Services Subject to Significant Competitive Challenges. LECs can receive rate-setting flexibility for a service by applying to the Commission and demonstrating that provision of the service faces significant competitive challenges.

In December 1992, SWB filed in District Court a challenge to both amended rules. The matter is still pending on motions for Rehearing in the Court of Appeals.

RATE-SETTING FLEXIBILITY FOR SERVICES SUBJECT TO SIGNIFICANT COMPETITIVE CHALLENGES

SUBSTANTIVE RULE 23.27

Under PURA Section 18(e), the Commission has the authority to establish procedures applicable to LECs to determine the level of competition in specific telecommunications markets and submarkets, and to apply appropriate regulatory treatment to LECs to allow them to respond to significant competitive challenges. Among the regulatory treatments which the Commission may implement for those services it deems are subject to significant competition are rate-banding (establishment of a range of allowable rates), customer-specific contracts, and detariffing. In addition, PURA Section 18(e) requires that the Commission allow customer-specific contracts for (1) central office-based (C.O.-based) PBX-type services for systems of 200 stations or more, (2) billing and collection services, (3) high-speed private line services of 1.544 megabits or greater, and (4) customized services. PURA imposes certain conditions for approval of a customer-specific contract, including that the contract recover the appropriate costs of providing the service.

Subst. R. 23.27 outlines the procedure for a LEC to obtain pricing flexibility for a service subject to significant competitive challenges. Specifically, a LEC must submit information supporting the competitive nature of the service in question. An evidentiary hearing is held to determine the extent of competition for the service and the type of pricing flexibility, if any, to be granted. The Commission will consider, among other things, the extent to which a substitutable service is available and the existence of barriers to entry and exit for a provider of the service.

If rate-banding is approved, the LEC must file a tariff showing the minimum and maximum rates and specifying its current rate. The minimum rates must recover 105

percent of the long-run incremental costs of providing the service. Customer-specific contracts also must meet this cost standard. The LEC is required to demonstrate that the terms of a customer-specific contract: (1) are not unreasonably preferential, prejudicial, or discriminatory; (2) are such that the service will not be subsidized by regulated monopoly services; and (3) are not predatory or anticompetitive.

A substantial revision of Section 23.27 was adopted on October 26, 1992. The revised rule clarifies the procedures and requirements for a LEC to request and obtain pricing flexibility. On December 2, 1992, SWB filed in District Court a challenge to this rule.

Four applications for pricing flexibility have been filed pursuant to Section 23.27. In December 1989, SWB filed an application to detariff billing and collection services, Docket No. 9224. That application was subsequently withdrawn.

On January 8, 1990, SWB filed an application requesting pricing flexibility for C.O.-based local area network (C.O. LAN) service, Docket No. 9301. The case was abated pending the resolution of the Commission's rulemaking to amend the definition of local exchange service In a stipulation filed December 7, 1992, the parties agreed that SWB would seek approval to offer its C.O. LAN service on a tariffed basis and withdraw its application for pricing flexibility. SWB formally withdrew its application on October 15, 1993, and the administrative law judge (ALJ) dismissed the application on October 18, 1993.

On January 4, 1991, SWB filed the third application for pricing flexibility in the provision of C.O.-based PBX-type services for systems with 75 to 200 stations, Docket No. 9960. The intent of the application was to obtain customer-specific pricing for C.O.-based PBX-type services for systems with 75 to 200 stations. The parties to this case stipulated that only one component of C.O.-based PBX-type service for systems serving 75 to 200 stations would be flexibly priced, namely, those switch functions that can be

replaced by a PBX or key system. The remaining components of the service may not be flexibly priced, but must be available at tariffed rates.

On April 22, 1993, SWB filed a fourth application, for pricing flexibility in the provision of MegaLink III Service. MegaLink III service is an intraLATA dedicated high capacity channel used for simultaneous two-way transmission of serial, bipolar, return-to-zero isochronous digital signals at transmission speed of 1.544 Megabits per second (Mbps). It can be used to transmit voice, low and high speed data, video, electronic mail, facsimile, and virtually any other signal which can be digitally encoded by the appropriate terminal equipment. SWB argued that in order to respond to significant competition in the high-capacity digital private line service market it should be permitted to establish banded rates for its MegaLink III service in Dallas-Ft. Worth and Houston market areas. On September 13, 1993, SWB withdrew its application.

DOCKET NO. 11109

Requests of Southwestern Bell Telephone Company to Obsolete and Grandfather Centrex Services and Joint Application of Parties to Determine if the Restrictions, Terms, and Conditions Associated with the Sharing of Centrex and Plexar Services are Unreasonable as a Matter of Regulatory Policy or in Violation of any Law

This proceeding involved the interpretation of portions of SWB's General Exchange Tariff and a request by SWB to obsolete and grandfather its Centrex service. It was established by agreement of the parties to sever the issues from a previous docket, Docket No. 9960.

Two of the parties in this proceeding, Centex Telemanagement, Inc. (CENTEX) and Enhanced Telemanagement Inc. (ETI), requested Commission approval of revisions to SWB's tariffs to eliminate application of the continuous property restriction and the minimum station line requirement regarding resale operations involving the use of SWB's Centrex and Plexar Services. Since CENTEX and ETI preferred use of SWB's Centrex Service in operating their shared/resale arrangements, they opposed SWB's request to obsolete that service.

On May 4, 1994 the Commission approved SWB's request to grandfather its Centrex Service and denied CENTEX's and ETI's request to revise SWB's General Exchange Tariff. The Commission found that under the current rate design approach followed by the Commission allowing the resale or sharing of central-office-based arrangements is not in the public interest. The Commission decision on this issue allows reconsideration at a later date.

DOCKET NO. 11336

General Counsel's Inquiry into the Reasonableness of the Rates, Terms, and Conditions of Southwestern Bell Telephone Company's Central Office-based PBX-Type Services for which Flexible Pricing is Permitted

On July 23, 1992 the Commission's General Counsel filed a petition for an inquiry into certain of SWB's C.O.-based PBX-type services. Among other things, the General Counsel alleged that the rates, terms, and conditions relating to SWB's flexibly-priced C.O.-based PBX-type services violate PURA because they (1) are unreasonably preferential, prejudicial, or discriminatory; (2) are subsidized either directly or indirectly by regulated monopoly services; and/or (3) are predatory or anticompetitive.

In his petition the General Counsel identified 10 specific issues that warranted inquiry, including the existence and bundling of SWB's Plexar-Custom service with SWB's monopoly components, the appropriate treatment of investments and depreciation, and the long-run incremental cost methodology used by SWB. The parties are currently trying to negotiate a settlement.

DOCKET NO. 11441

Petitions of Infodial, Inc. and Other Parties for Assignment of Abbreviated N11 Dialing Codes

In September 1992 Infodial, Inc. filed a petition requesting the Commission to order all LECs to assign to it the abbreviated N11 dialing code 511 or another available

N11 code. Numerous other parties, including a number of newspapers, filed similar petitions, which were consolidated with Infodial's petition.

The petitioners asserted that assignment of available N11 codes (211, 311, etc.) to independent information-service providers is in the public interest for the following reasons: (1) such assignment would generate additional revenue for a LEC without requiring significant extra investment, thus making a contribution to basic local service; (2) it would promote the dissemination of information to the public; (3) it would allow for the development of new services; and (4) it would provide an opportunity for competition in the information-service industry. Moreover, the petitioners alleged that not allowing information-service providers to use an N11 code would constitute discriminatory and anti-competitive behavior.

In April 1994, however, the Commission voted against such an assignment of N11 codes, and instead instructed the Commission staff to undertake a rulemaking project relating to N11 uses. This vote upheld the recommendation of the ALJ, whose Proposal for Decision stated as follows: "Because the demand for N11s would exceed the available supply and existing LEC services are adequate to meet the petitioners' needs, I conclude that assigning N11s to the petitioners for competitive commercial purposes would be unreasonably preferential, in violation of PURA Sections 45 and 47. I join the General Counsel in recommending a rulemaking project to review the propriety of other LEC N11 uses and to consider potential public interest N11 uses."

Accordingly, the staff recently initiated Project No. 12853, to explore possible public-interest uses of N11 codes and to assess such LEC services as SWB's Directory Assistance Call Completion, which allows completion of intraLATA calls through use of the 411 code.

The issue of assigning N11 codes is also the subject of an FCC rulemaking, CC Docket 92-105.

DOCKET NO. 11487

Inquiry of the General Counsel into the Marketing and Business Practices of Southwestern Bell

SWB's affiliate Southwestern Bell Messaging Services, Inc. (SMSi) is a provider of voice messaging service (VMS). VMS is an enhanced service that SWB is allowed to offer to the public, provided it complies with competitive safeguards set forth by the FCC. (These safeguards consist primarily of accounting and affiliate transaction rules, discrimination protections, and Open Network Architecture plans, which detail how each BOC is to unbundle its basic network services into "building blocks" that any firm can buy.) SWB, however, does not consider itself the provider of the VMS that its affiliate SMSi now provides to the public.

In September 1992 the General Counsel initiated an inquiry into SWB's marketing and business practices, alleging the company's conduct to be unlawful, anti-competitive, and discriminatory. Specifically, the inquiry sought to investigate (1) SWB's business and marketing practices in relation to its provision of services to SMSi and (2) the deployment, quality, functions, and rates of network services provided by SWB to VMS providers, including both SMSi and non-affiliated companies.

In June 1993, however, following the General Counsel's withdrawal of his petition for inquiry, the presiding ALJ issued an order dismissing the docket. These actions followed the settlement of several issues between SWB, SMSi, and other VMS providers; other issues continue to be debated at the Federal level. The Commission has filed comments with the FCC on some of these issues.

COMPETITION IN INTRALATA LONG-DISTANCE TELECOMMUNICATIONS

Making a toll call with an AT&T or MCI access code is a lot like getting lost while on vacation: you have to stop and figure out where you are, you find yourself going out of your way for NO GOOD REASON, and the whole deal ends up costing more than you expected.

Southwestern Bell ad for 1+ Saver, a calling plan for intraLATA toll

The Modified Final Judgment ordered the breakup of the Bell System on January 1, 1984. A subsequent order of the U.S. District Court that oversees the breakup established geographic areas within which the Bell Operating Companies could serve. These geographic areas are known as either local access and transport areas (LATAs) s or special market areas (SMAs). A separate consent decree, in connection with GTE's 1983 acquisition of the predecessor company to Sprint Communications, called for the creation of similar geographic areas in the GTE service area. There are 16 LATAs in Texas and two SMAs. The term LATA is used in this report to refer to both SMAs and LATAs. A map of Texas LATAs and SMAs appears in Exhibit VII.

The creation of LATAs divided the long-distance market into two submarkets: the intraLATA or "local toll" market, in which SWB and GTE can compete, and the interLATA or statewide long-distance market, from which SWB and GTE are excluded.

MARKET PARTICIPANTS

Providers of intraLATA long-distance service include LECs and IXCs. IXCs providing service in Texas include fourteen facilities-based carriers and 430 resellers. Competition in the intraLATA market has been permitted in Texas ever since the LATAs were created. Of the LECs' regulated telecommunications services, intraLATA toll has the lowest regulatory barriers to entry: no telecommunications utilities are barred from

participation in this market. Even cellular carriers carry some intraLATA calls, as discussed below.

Yet despite their regulated rates, which are higher than those of the IXCs, and the absence of barriers to entry, LECs, according to PUC market share estimates, dominate the intraLATA toll market. This dominance results from one significant competitive advantage enjoyed by the LECs: when a customer dials 1+ to place an intraLATA call, that call is automatically carried by the LEC, regardless of who the caller's or recipient's presubscribed long-distance carrier may be. In order to use a long-distance carrier, the caller must dial at least five extra digits--usually an IXC access code of the form 10XXX. The Commission has allowed LECs to maintain this 1+ intraLATA dialing advantage to protect universal service under current Commission-approved rate design for LECs..

LECs AND IXCs

To gather data on competition in the Texas intraLATA telecommunications market, the Commission requested in the IXC questionnaires information regarding IXC revenues from intraLATA service. Many of the state's IXCs, however, did not respond to questions about intraLATA revenues. Of fourteen facilities-based carriers, four did not answer questions about intraLATA revenues, and two were able to provide only estimates. Of the four largest IXCs, only one provided intraLATA revenue data; two others provided estimates. With such incomplete intraLATA revenue data, it is not possible to produce a reliable measure of intraLATA market share.

We have, however, estimated IXC intraLATA revenues and market shares based on the information reported by the eight facilities-based carriers that did provide intraLATA revenue data and the two that reported estimates. That market share estimate appears in the table "Estimates of Market Share for Facilities-Based IXCs, IntraLATA Services." The percentages of IXC intraLATA revenues for MTS, 800 and WATS were estimated based on the relationship between total revenues and intraLATA revenues reported by the ten companies that did provide intraLATA data. These

Estimates of Market Share for Facilities-Based IXCs

IntraLATA Services

		1992 Quarters 3 & 4		1993 Quarters 1 & 2		1993 Quarters 3 & 4		1994 Quarters 1 & 2	
MTS	Reported LEC Revenues	230,660,214		278,758,607		304,893,042		289,466,699	
	Estimated IXC Revenues	17,769,043		17,514,419		41,771,005		17,137,958	
	IXC market share		7%		6%		12%		6%
800	Reported LEC Revenues	2,838,344		2,640,957		3,003,635		3,130,892	
	Estimated IXC Revenues	8,575,090		9,022,609		9,491,636		9,485,057	
	IXC market share		75%		77%		76%		75%
WATS	Reported LEC Revenues	866,015		869,595		699,191		613,173	
	Estimated IXC Revenues	16,125,486		16,303,295		18,533,770		22,557,061	
	IXC market share		95%		95%		96%		97%
TOTAL	Reported LEC Revenues	234,364,573		282,269,159		308,595,868		293,210,764	
	Estimated IXC Revenues	42,469,620		42,840,323		69,796,411		49,180,077	
	IXC market share		15%		13%		18%		14%

relationships were extrapolated to reported IXC revenues for MTS, 800 and WATS service. As the table shows, the intraLATA WATS market appears to be dominated by IXCs, who have a market share of about 95 percent. The MTS market (intraLATA toll, or "local toll," in which the LECs have the 1+ advantage) is dominated by LECs. The IXCs' share of this market ranged from six to 12 percent during the study period.

When the intraLATA market is viewed as a whole (combining WATS, 800 and MTS), LECs enjoy about 85 percent of the market. The reader is cautioned that these estimates may be unreliable because they are based on a sampling of IXCs, and some of the IXCs' responses themselves were estimates.

CELLULAR

In addition to citing competition from IXCs, LECs complain in their responses to the questionnaire that cellular carriers are a growing competitive threat in the intraLATA market. According to several LECs, cellular carriers are enhancing the appeal of their services by offering plans that include expanded "toll-free" calling scopes, made possible by growth of the cellular carriers' inter-city networks. (Such "toll-free" cellular calls are charged for local air time only.)

Although Southwestern Bell and GTE-Contel note that nationwide annual growth rates for cellular revenues have recently averaged about 40 percent, these LECs do not report estimates of the traffic or revenue loss they have experienced as a consequence of this cellular growth. Two other large LECs assert that cellular carriers have been eroding their intraLATA minutes of use at an increasing rate, but offer no quantification. They also fear accelerated revenue erosion with the continued development of wireless services. One small LEC says that its billed intraLATA toll usage has decreased 25 to 30 percent from its pre-cellular level.

EXTENDED AREA SERVICE (EAS)

A major factor in the intraLATA toll market is extended area service (EAS) and its cousin, expanded toll-free local calling (ELC). Both arrangements involve an extension of the basic local calling scope of an exchange. The Commission's rules provide for three types of EAS/ELC arrangements:

1) Traditional EAS, in which a community petitions the Commission for optional or mandatory EAS to a single exchange. Such a filing requires that the petitioners demonstrate that the areas involved in the EAS arrangement share a community of interest. This community of interest is demonstrated by examining traffic patterns of telecommunications between the areas.

2) Joint petitions for EAS, in which one or more LECs file jointly with a community to establish an EAS arrangement. Such filings bypass many of the rigorous requirements, such as a traffic study, that are otherwise required to receive EAS. Joint EAS petitions, unlike traditional EAS, also allow for expansion to two or more exchanges in a common calling plan. Since the joint filing provision was added to the PUC rules, EAS petitions have increased significantly.

3) Expanded toll-free local calling (ELC) arrangements, authorized by PURA Section 93A, enacted in 1993 by the 73rd Legislature. These filings for local calling between nearby exchanges, which receive expedited processing, are discussed in greater detail below.

IMPACT OF COMPETITION ON RURAL AREAS

ELC, the expansion of toll-free local calling available to exchanges with a 22-mile proximity, discourages competition for intraLATA calling in rural areas. When an exchange receives ELC, competition for calling between the affected exchanges is eliminated, beyond that existing for ordinary local calling. Since ELC is mandatory (once approved by 70 percent of the subscribers casting ballots, its flat monthly fee is

charged to every subscriber in the exchange) and calls between the affected exchanges are toll-free, price-based competition for such calls is no longer possible.

Nevertheless, the pricing structure for ELC causes it to be well-received in rural areas where public facilities like hospitals, shopping centers and schools are often shared with communities several miles away. Its benefits to rural communities are mitigated by several exemptions provided for in the law: for example, LECs serving fewer than 10,000 access lines are exempt, as are co-ops. Another exemption covering metropolitan exchanges makes ELC unavailable in metro areas.

In their responses to the questionnaire, a number of small LECs claim competitors have 20 percent of the MTS market and 25 percent of the WATS market in the rural (and other non-urban) areas they serve. The LECs did not single out cellular carriers, and it is likely this competition comes from both IXCs and cellular carriers.

COMMISSION ACTIONS

DOCKET NO. 11840: EXTENDED AREA SERVICE (EAS) PETITION FOR THE LOWER RIO GRANDE VALLEY

In March 1992 the Commission received a joint petition from the Lower Rio Grande Valley Development Council, SWB and GTE to establish EAS among 18 exchanges. When three IXCs and the Texas Association of Long-Distance Telephone Companies (TEXALTEL) intervened in the docket, this docket became the first contested joint EAS petition to be considered by the Commission. In their motion to intervene, the IXCs sought relief from what they argued was the anticompetitive effect of EAS on the long-distance market within the Brownsville LATA. The examiner severed the competitive issues from the EAS case. The IXCs subsequently filed with the Commission a petition for rulemaking seeking relief from, among other things, the anticompetitive effects of EAS on the intraLATA toll market.

PROJECT 13008: JOINT PETITION OF TEXALTEL, MCI AND AT&T

The IXCs' petition (Project 13008) requested several forms of relief in the intraLATA market. Specifically, it sought intraLATA dialing parity, which would end the reservation of 1+ intraLATA traffic to the LECs, which had been Commission policy since the implementation of equal access after divestiture. In addition, the IXCs sought relief from what they argued is the erosion of intraLATA competition as the growing number of EAS areas continues to convert long-distance traffic to local.

The Commission denied the IXCs' petition, but established Projects 13219 (IntraLATA Dialing Parity) and 13220 (Competitive Issues Related to Extended Area Service) to address the issues raised in the petition. Those projects are both pending. On December 2, 1994, the Commission published questions in the *Texas Register* seeking information on the public benefits, implementation costs, economic benefits and revenue effects of intraLATA dialing parity; on December 16 the Commission voted to publish questions in Project 13220.

PROJECT 12098: IMPLEMENTATION OF SB 632 REGARDING TOLL-FREE LOCAL CALLING

The 73rd legislature adopted SB 632, which added Section 93A to PURA. This new law required the Commission to expedite the expansion of toll-free calling areas between nearby exchanges. The law provides for toll-free local calling (ELC) for exchanges with a 22-mile proximity. After a successful petition and ballot, subscribers in a petitioning exchange pay an additional per-line fee of no more than $3.50 per month for residences and $7.00 per month for businesses and enjoy an expansion of their local calling area. Any LEC costs not recovered by these fees will be determined in a later company-specific proceeding. These residual costs will be paid by the affected LEC's general body of ratepayers in the form of a monthly per-line fee.

After a lively and contentious rulemaking proceeding which drew participation from legislators and citizens from throughout the state, the Commission adopted

amendments to Subst. R. 23.49, which established procedures for expedited hearings on ELC petitions.

Since the rule's adoption in November 1993, the Commission has received 290 petitions requesting ELC to 1,710 exchanges. The rule provides for streamlined processing of such petitions, and 125 of these 290 petitioning exchanges have successfully balloted subscribers to receive ELC. The approval process requires the affirmative vote of 70 percent of the individual subscribers casting ballots in the petitioning exchange.

In many ELC projects, implementation is delayed due to technical impediments. If the equipment in one or more of the affected central offices does not have the capacity to handle the increase in traffic ELC generates, implementation must be delayed until the equipment can be upgraded or replaced. In several projects, entire central offices have been scheduled for replacement because the existing technology will not support ELC. In some cases, implementation has been delayed until late 1995, fully a year after final Commission approval of the ELC petition.

Such problems are especially likely to arise when one exchange is named in numerous petitions. For example, the Sherman exchange has been petitioned in ten separate ELC applications. GTE is in the process of expanding the capacity of the Sherman central office to accommodate these petitions. This expansion has had the effect of delaying the implementation dates for most of the ten petitions requesting ELC to Sherman.

COMPETITION IN STATEWIDE LONG-DISTANCE TELECOMMUNICATIONS

Public policy so far has encouraged competition. Since the breakup of the old Bell System 10 years ago, long-distance prices have dropped more than 60 percent in real terms. Driven by competition, new technology and services have come into the market with unprecedented speed.

Robert E. Allen, chairman and CEO, AT&T
Wall Street Journal, April 19, 1994

Since our 1993 report on the Scope of Competition, the number of interexchange carriers registered with the Commission has grown 153 percent. Yet the revenue of the IXCs has grown only eight percent, from $1.7 billion in 1991-92 to $1.8 billion in 1993-94. These numbers seem to suggest thriving competition, yet four carriers overwhelmingly dominate the market, with over 90 percent of all revenues.

To gather data on competition in the interexchange market, the Commission ordered each of those IXCs registered to do business in the state to respond to a questionnaire called the Interexchange Telecommunications Utility Data Report (IXCDR). The IXC questionnaire (see Exhibit VIII) called for information on revenues, costs of resold telecommunications service, and numbers of presubscribed lines.

MARKET PARTICIPANTS

As of mid-1994, IXCs providing service in Texas included 14 facilities-based carriers[8] and several hundred resellers.

SWB and GTE are prevented by their respective consent decrees from competing in the interLATA market, but several independent LECs provide such service through subsidiaries.

[1]A facilities-based interexchange carrier is an IXC that owns or leases transmission facilities. (For purposes of this definition, leasing transmission facilities provides more control than the mere purchase of transmission services.)

The IXCs' responses to the Commission's questionnaire is summarized below:

Response to Commission Order to File the IXCDR

Facilities-based-IXCs	14	
Resellers reporting revenue	188	
Resellers reporting no revenue[9]	244	
Total IXCs filing data reports		446
Bad address, merged, etc.		105
Delinquent IXCs		124
Total IXCs		675

Attached as Exhibit IX are lists of Texas resellers and delinquent IXCs.

In measuring the market concentration of the interexchange carriers, the relationship between facilities-based carriers and the resellers who purchase and resell their services must be considered carefully in order to avoid the double-counting of revenues. In this report, we have resolved this issue by treating the provision of service by facilities-based carriers and the resale of those services as separate markets. An analogy to this way of defining these markets is the relationship between retailers and manufacturers in a product market. Just as it would be inappropriate to include the revenues of a shoe store in the market share calculations for shoe manufacturers, it is inappropriate to combine the revenues of resellers and facilities-based telecommunications carriers in one market.

FACILITIES-BASED CARRIERS

In 1988 there were 12 facilities-based IXCs serving in Texas; today there are 14. They are:

AT&T
Cable & Wireless
Century Telecommunications

[9] In many cases a reseller filing an IXCDR reported no revenues because its underlying carrier included in its own report the reseller's revenues. The number also includes four late-filing companies (filing after November 30, 1994).

Electra Communications
LDDS Metromedia Communications
MCI
Network Operator Services
NTS Communications
Operator Service Company
Peoples Communication
Qwest Communications
Sprint Communications
Vadacom
Wiltel.

The table "Statewide Long Distance, Facilities-Based Carriers" is compiled from their responses to the IXC questionnaire.

The companies' revenues are reported on a service-by-service basis, as we have traditionally done in this biennial report. With changing technology and product definitions, however, this distinction among services is becoming artificial and unreliable. In 1989 the Commission found that

> *The toll market cannot be divided realistically between WATS, 800 Service, MTS, or other such services because the IXCs have the ability to reconfigure their networks at will to provide different kinds of services that are essentially substitutable or interchangeable.*
>
> Finding of Fact 28, Docket No. 7330, August 30, 1989.

For this reason, the revenue shares for Total revenues may be a better indication of market concentration than the service-by service measures.

The fourth column contains a four-firm concentration ratio, calculated simply by summing the revenues of the four firms with the greatest revenues (AT&T, MCI, Sprint and LDDS in each market) and dividing the sum by industry revenues. Each service

STATEWIDE LONG DISTANCE
FACILITIES-BASED CARRIERS

Service	Period	Industry Revenues	4-Firm Concentration Ratio	Hirschman Herfindahl Index
MTS	July - Dec. 1992	535,212,145	97.3%	4963
	Jan. - June 1993	509,140,094	96.9%	4759
	July - Dec. 1993	533,473,887	96.9%	4894
	Jan. - June 1994	508,544,760	96.8%	4971
WATS-type	July - Dec. 1992	67,105,644	100.0%	5551
	Jan. - June 1993	65,687,274	100.0%	6211
	July - Dec. 1993	71,864,173	100.0%	6783
	Jan. - June 1994	88,912,343	100.0%	6450
Private Line	July - Dec. 1992	66,217,035	90.6%	4558
	Jan. - June 1993	64,409,814	89.9%	4233
	July - Dec. 1993	69,386,129	89.9%	4088
	Jan. - June 1994	69,475,001	88.2%	3254
800	July - Dec. 1992	108,271,340	95.1%	4100
	Jan. - June 1993	109,630,730	94.8%	4172
	July - Dec. 1993	95,875,107	93.6%	3519
	Jan. - June 1994	103,661,830	93.7%	3609
Other	July - Dec. 1992	15,810,322	100.0%	5092
	Jan. - June 1993	20,697,385	100.0%	5984
	July - Dec. 1993	19,271,283	100.0%	5150
	Jan. - June 1994	19,799,854	100.0%	4995
Total	July - Dec. 1992	792,616,486	96.2%	4236
	Jan. - June 1993	769,565,297	95.6%	4051
	July - Dec. 1993	789,870,579	95.3%	4027
	Jan. - June 1994	790,393,788	95.1%	3902

is heavily dominated by its top four firms. For comparison, below are some concentration ratios for representative industries:[10]

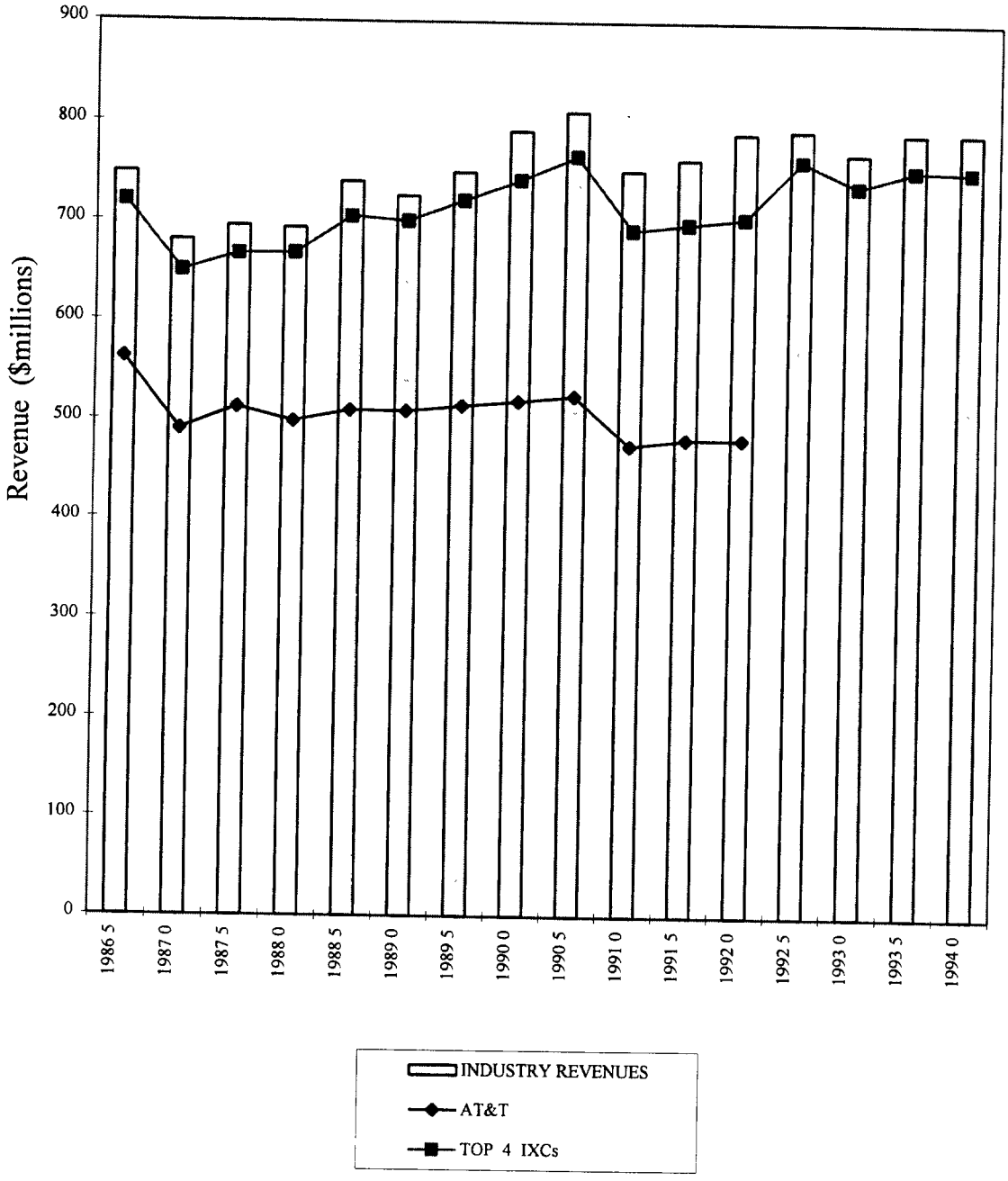
Chewing gum	96%
Motor vehicles	90%
Aircraft	72%
Farm machinery	45%
Electronic computers	43%
Pharmaceutical preparations	22%
Women's dresses	6%

Historical data on the revenues of facilities-based carriers is shown in the table "Revenue of Facilities-Based Interexchange Carriers, 1986 - 1994." Revenue for the industry as a whole continues to grow, while the market share of the four largest firms remains high. During the period from 1986 to 1992, AT&T's Texas intrastate revenues did not grow with the market for interexchange services provided by facilities-based interexchange carriers.

Another measure of market concentration is the Hirschman-Herfindahl Index (HHI). This measure is defined as the sum of the squares of the market shares (expressed as a percentage) of all the competitors in a market. This measure is used by the Department of Justice in evaluating the impact on competition of horizontal mergers. According to the *1992 Merger Guidelines,* "The Agency divides the spectrum of market concentration as measured by the HHI into three regions that can be broadly characterized as unconcentrated (HHI below 1000), moderately concentrated (HHI between 1000 and 1800), and highly concentrated (HHI above 1800)." As the table shows, all four long-distance service markets are highly concentrated by this standard.

[10] "Concentration Ratios in Manufacturing," Bureau of the Census MC87-S-6, February 1992.

REVENUE OF FACILITIES-BASED INTEREXCHANGE CARRIERS 1986 - 1994



RESELLERS

The resale market is much smaller than that of the facilities-based carriers, but it has many more participants. Nearly 200 resellers reported intrastate Texas revenues on the IXC questionnaire. Total reseller revenues for the study period are shown below:

July - Dec. 1992	Jan. - June 1993	July - Dec. 1993	Jan. - June 1994
$85,440,512	$99,928,920	$115,950,006	$130,741,822

The resale market is less than one-fifth the size of the market for facilities-based carriers. Furthermore, more than half the revenues of the resellers are paid to the facilities-based carriers as costs of resold telecommunications services. Even if the resellers were included with the facilities-based carriers[11], the HHI for the long-distance market would still be well over 1800.

IMPACT OF COMPETITION ON RURAL AREAS

With the LEC questionnaire the Commission gathered data from LECs about their originating access minutes of use (MOU) sold to IXCs. We asked the LECs to break the MOU down into three broadly-defined geographic areas: Metro, Rural and Other counties. (See the discussion at page four). The LECs' responses, summarized in the table "Intrastate Local Access Switching Minutes of Use," provide some information about the different levels of competition in urban and rural areas. The data show, surprisingly, that during the two-year study period long distance competition appears to have grown in Rural and Other counties, while it diminished in Metro areas.

The growth of competition in Rural and Other areas reflects, among other factors, the spread of equal access throughout the state. In 1991, only 43 percent of rural

[11] To correct for double-counting of revenues, market share should be based on telecommunications value added, as described in our 1993 report on the Scope of Competition in Telecommunications Markets. However, the HHI is well above 1800 even when computed on uncorrected revenues.

INTRASTATE LOCAL ACCESS SWITCHING MINUTES OF USE

(thousands)

	Period	Minutes of Use	4-Firm Concentration Ratio
Metro	July - Dec. 1992	1,462,547	86.21%
	Jan. - June 1993	1,398,220	90.47%
	July - Dec. 1993	1,479,652	90.50%
	Jan. - June 1994	1,658,238	90.32%
Rural	July - Dec. 1992	222,775	93.84%
	Jan. - June 1993	283,471	89.31%
	July - Dec. 1993	340,628	92.51%
	Jan. - June 1994	370,203	91.32%
Other	July - Dec. 1992	1,449,123	90.68%
	Jan. - June 1993	1,460,049	89.17%
	July - Dec. 1993	1,572,047	89.36%
	Jan. - June 1994	1,688,166	88.39%
Statewide	July - Dec. 1992	3,134,446	88.82%
	Jan. - June 1993	3,141,740	89.76%
	July - Dec. 1993	3,392,327	90.17%
	Jan. - June 1994	3,716,607	89.55%

subscribers had equal access. By 1993, this number had grown to 72 percent. Equal access for subscribers in Other counties grew from 85 percent to 94 percent during the same period.

In the IXC questionnaire the Commission ordered IXCs to provide data on their presubscribed lines in the same three broad geographic areas. Because many IXCs, however, indicated they could not provide complete answers to that question, we are not able to produce a reliable summary of that data.

COMMISSION ACTIONS

PROJECT 12194: IMPLEMENTATION OF SB 377 DEREGULATING THE RATES OF AT&T

The 73rd legislature adopted SB 377, which amended the definition of a dominant carrier to exclude an interexchange carrier. This change in the law had the effect of removing AT&T, which had been designated a dominant interexchange carrier by the Commission in 1988, from the ratesetting jurisdiction of the Commission. Since September 1, 1993, AT&T has been subject to the same regulatory oversight as the state's other nondominant carriers.

In addition, the bill limited the circumstances in which the Commission may assert its regulatory authority over an interexchange carrier. The amendments removed the Commission's authority to act on its own motion to apply its full regulatory authority if it found that an IXC had the ability to control prices in a manner adverse to the public interest. Instead, the amendment allows the Commission to enter such orders as may be necessary to protect the public interest if a complaint is filed against an IXC by another IXC and the Commission finds that the respondent IXC has engaged or attempted to engage in predatory pricing. The Commission has limited authority to enter orders to protect the public interest on its own motion in other situations. This authority was not affected by SB 377.

In September 1994 the Commission adopted amendments to its rules to make them consistent with these changes in its oversight of the interexchange market.

REGULATION OF OPERATOR SERVICE PROVIDERS (OSPs)

The Public Utility Commission of Texas receives many complaints from consumers regarding the high rates some OSPs charge on toll calls from private pay telephones. In response to these complaints, the Legislature in 1989 added Section 18A to PURA, directing the Commission to adopt a rule regarding operator services. In 1989 and 1990 the Commission adopted Subst. Rules 23.55, relating to Operator Services; moreover, in 1991 the Commission amended Subst. Rule 23.54, relating to Private Pay Telephone Service. These rules helped protect consumers by requiring, among other things, the provision of relevant information, including rate information when requested, and the unblocking of access-code calls (which begin with 10XXX, 1-950, or 1-800) from private pay telephones and other telephones intended for public use. However, neither rule contained any limitation on OSP rates other than for coin-paid local calls, as Texas law does not grant such authority to the Commission.

By contrast, the August 1994 update of the *NARUC Report on the Status of Competition in Intrastate Telecommunications* shows 32 states to exercise some form of regulation over the rates OSPs charge on calls from private pay telephones. An informal survey, conducted by the Commission staff in November 1994 of eight of the larger states with such regulations, indicated that the most common form of regulation is to cap OSP rates by tying them to those charged by AT&T (or perhaps to the LEC for intraLATA calls). Typically, OSP rate elements either could not exceed the corresponding AT&T rate elements, or could do so by no more than a small percentage or amount.

LEGISLATIVE RECOMMENDATIONS

DEFINITION OF A TELECOMMUNICATIONS UTILITY

The term "public utility" or "utility," when used in this Act, includes any person, corporation, river authority, cooperative corporation, or any combination thereof ... owning or operating for compensation in this state equipment or facilities for: ... the conveyance, transmission, or reception of communications over a telephone system as a dominant carrier as hereinafter defined ("telecommunications utilities" hereinafter); provided that no person or corporation not otherwise a public utility within the meaning of this Act shall be deemed such solely because of the furnishing or furnishing and maintenance of a private system or the manufacture, distribution, installation, or maintenance of customer premise communications equipment and accessories; and provided further that nothing in this Act shall be construed to apply to telegraph services, television stations, radio stations, community antenna television services, or radio-telephone services that may be authorized under the Public Mobile Radio Services rules of the Federal Communications Commission, other than such radio-telephone services provided by wire-line telephone companies under the Domestic Public Land Mobile Radio Service and Rural Radio Service rules of the Federal Communications Commission; and provided further that interexchange telecommunications carriers (including resellers of interexchange telecommunications services), specialized communications common carriers, other resellers of communications, other communications carriers who convey, transmit, or receive communications in whole or in part over a telephone system, and providers of operator services as defined in Section 18A(a) of this Act (except that subscribers to customer-owned pay telephone service shall not be deemed to be telecommunications utilities) are also telecommunications utilities, but the commission's regulatory authority as to them is only as hereinafter defined; ... "dominant carrier" when used in this Act means (i) a provider of any particular communication service which is provided in whole or in part over a telephone system who as to such service has sufficient market power in a telecommunications market as determined by the commission to enable such provider to control prices in a manner adverse to the public interest for such service in such market; and (ii) any provider of local exchange telephone service within a certificated exchange area as to such service.... Any such provider determined to be a dominant carrier as to a particular telecommunications service in a market shall not be presumed to be a dominant carrier of a different telecommunications service in that market. The term does not include an interexchange carrier that is not a certificated local exchange carrier, with respect to interexchange services.

PURA Section 3(c)

The definition of a telecommunications utility is in need of clarification and updating. The exemption for cellular service contains an obsolete reference to FCC rules.

Definition of Local Exchange Service

In the process of redefining local exchange service (see page 52), the Commission expressly reviewed the regulatory scheme established in PURA. The Commission concluded that LECs should continue to be regulated as dominant carriers and that new market entrants providing services other than local exchange service should continue to be regulated as nondominant carriers. On December 2, 1992, SWB filed in District Court a challenge to the Commission's endorsement of this regulatory scheme.

SWB's challenge arises from an alternative interpretation of PURA Section 3(c)(2)(B), which defines a dominant carrier. According to clause (ii) of subsection (c)(2)(B), a dominant carrier includes "any provider of local exchange telephone service within a certificated exchange area as to such service." SWB argues that the phrase "as to such service" renders a LEC a dominant carrier only with respect to its provision of local exchange services. In other words, according to SWB the Commission's full regulatory authority extends only to the rates and services offered by a LEC for its local exchange service; all other rates and services offered by the LEC are subject only to minimal regulation absent a determination of dominance under PURA Section 3(c)(2)(B)(i).

The Commission believes that SWB's interpretation of PURA Section 3(c)(2)(B)(ii) is inconsistent with the provisions of PURA as a whole and is not required by the plain language of the clause. Under the Commission's interpretation of clause (ii), the dominance designation attaches to the provider and, therefore, applies to all services of that provider. In other words, any entity providing local exchange service within any exchange area that has been certificated with respect to the provision of local exchange service is a dominant carrier. Such an interpretation harmonizes clause (ii) with PURA as a whole, including those provisions of PURA Section 18 that prohibit cross-subsidization and anticompetitive practices.

It is possible that an extensive rewrite of the telecommunications provisions of PURA will render this dispute moot. If, however, the definitions contained in PURA

Section 3(c)(2)(b) remain critical for establishing the extent of the Commission's regulatory jurisdiction, this section should be clarified.

SCOPE OF COMPETITION REPORT

> *(k) Before January 15 of each odd-numbered year, the commission shall report to the legislature on the scope of competition in regulated telecommunications markets and the impact of competition on customers in both competitive and noncompetitive markets, with a specific focus on rural markets. The report shall include an assessment of the impact of competition on the rates and availability of telecommunications services for residential and business customers and shall specifically address any effects on universal service. The report shall provide a summary of commission actions over the preceding two years which reflect changes in the scope of competition in regulated telecommunications markets. The report shall also include recommendations to the legislature for further legislation which the commission finds appropriate to promote the public interest in the context of a partially competitive telecommunications market.*
>
> *(p) Before January 15 of each odd-numbered year, the commission shall report to the legislature on the scope of competition in regulated telecommunications markets and the impact of competition on customers in both competitive and noncompetitive markets, with a specific focus on rural markets. The report shall include an assessment of the impact of competition on the rates and availability of telecommunications services for residential and business customers and shall specifically address any effects on universal service. The report shall provide a summary of commission actions over the preceding two years that reflect changes in the scope of competition in regulated telecommunications markets. The report shall also include recommendations to the legislature for further legislation that the commission finds appropriate to promote the public interest in the context of a partially competitive telecommunications market.*

Subsections 18(k) and (p) contain virtually identical language requiring the Commission to produce a biennial report on the scope of competition. One subsection should be deleted.

An extensive rewrite of the telecommunications provisions of PURA may warrant a change to the type of report the Commission makes to the Legislature. The report could continue to focus on the scope of competition, or it could be a more general analysis of the impact of legislatively mandated reforms. In either case, PURA should be amended to give the Commission authority to gather data from all participants in the telecommunications industry. Cellular carriers and cable TV companies, for example, are often cited by LECs as significant competitors.

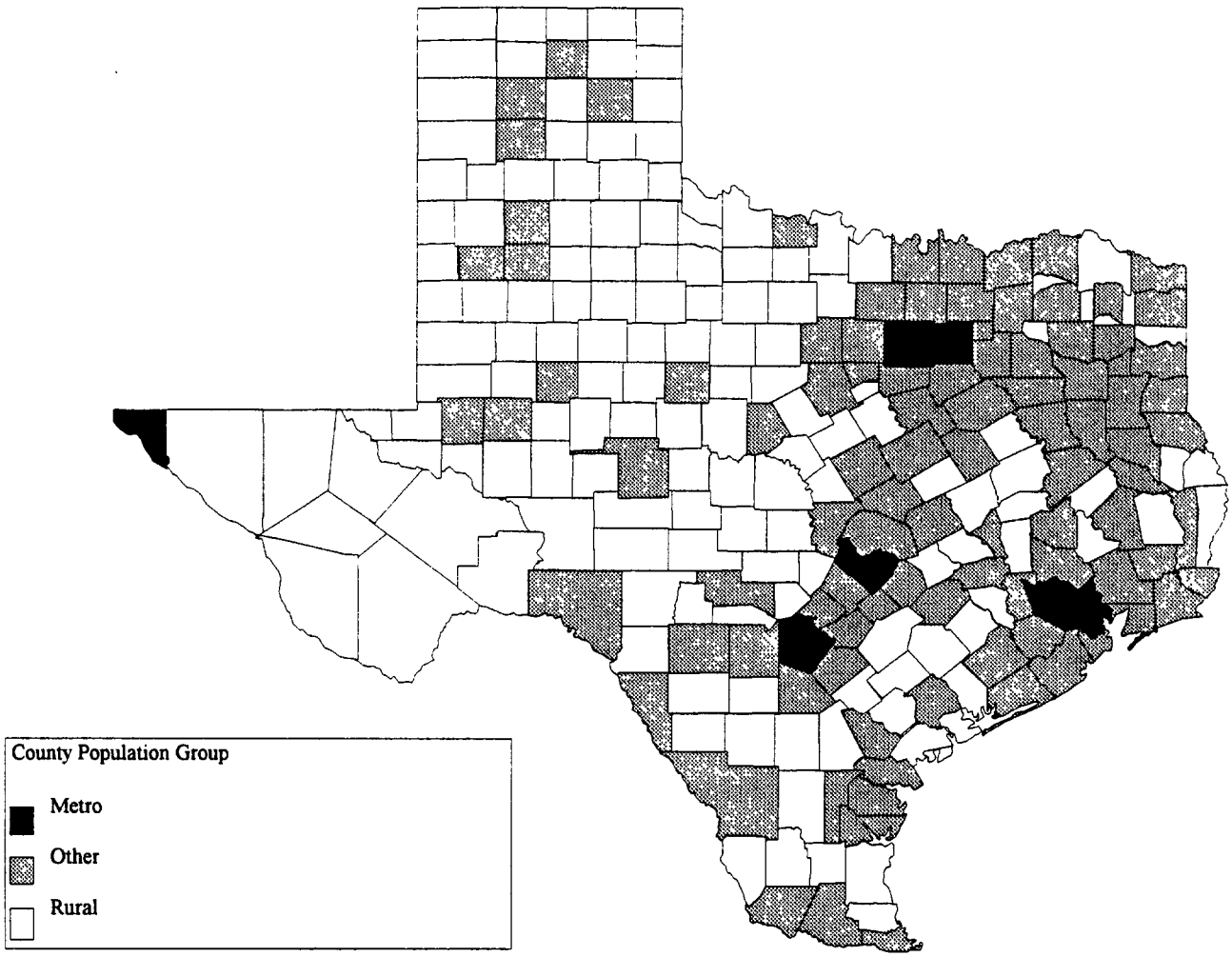
If the Commission does not have authority to gather information from all participants in the industry, then questions arise about the value of a report based on information gathered from a limited number of participants. This is true regardless of whether the report purports to evaluate either the scope of competition or the impact of reforms. In preparing this report, the Commission could not require the reporting of information by many participants cited as competitors by LECs. It was therefore impossible to directly compare data from different segments of the industry and reach meaningful conclusions. If the Legislature declines to expand the Commission's authority to gather information from all participants, then it may wish to consider whether the value of a report based on information gathered from certain segments of the industry justifies the regulatory burden placed on those who provide the information.

Any reporting requirement should contain language addressing the confidentiality of data reports submitted to the Commission as part of the Commission's research to prepare the report. The Commission currently experiences reluctance on the part of companies to provide the information required for the preparation of the report. This reluctance has already prompted the Commission to request an opinion from the Attorney General as to whether the reported information qualifies under the trade secret exemption of the Open Records Act. That opinion request is pending. The Open Records Act exempts from disclosure information gathered by the Legislature, but the exemption apparently does not cover information gathered by other agencies in order to report to the Legislature. If additional companies are required to report, those companies are even more likely to be reluctant to comply because they have not previously been required to disclose information about their operations.

Additionally, in order to meaningfully apply its reporting requirements, the Commission needs authority to impose administrative penalties on noncomplying companies. In 1994, 124 IXCs failed to comply with the Commission's order to file the IXC questionnaire. The limited scope of its authority to require reports, and noncompliance with the reporting requirements it does impose impair the Commission's

ability to present an accurate report on the extent and growth of competitive activity to the legislature.

Exhibit I


County Population Group
Metro
Other
Rural

Metro Counties
6 Counties with Population greater than 500,000

	Population	Region
BEXAR	1,185,394	South Texas
DALLAS	1,852,810	Metroplex
EL PASO	591,610	Upper Rio Grande
HARRIS	2,818,199	Gulf Coast
TARRANT	1,170,103	Metroplex
TRAVIS	576,407	Central Texas
Total population	8,194,523	

Rural Counties

151 Counties with Population less than 20,000

	Population	Region		Population	Region
ANDREWS	14,338	West Texas	KENT	1,010	Northwest Texas
ARANSAS	17,892	South Texas	KIMBLE	4,122	West Texas
ARCHER	7,973	Northwest Texas	KING	354	High Plains
ARMSTRONG	2,021	High Plains	KINNEY	3,119	South Texas
AUSTIN	19,832	Gulf Coast	KNOX	4,837	Northwest Texas
BAILEY	7,064	High Plains	LA SALLE	5,254	South Texas
BANDERA	10,562	South Texas	LAMB	15,072	High Plains
BAYLOR	4,385	Northwest Texas	LAMPASAS	13,521	Central Texas
BLANCO	5,972	Central Texas	LAVACA	18,690	South Texas
BORDEN	799	West Texas	LEE	12,854	Central Texas
BOSQUE	15,125	Central Texas	LEON	12,665	Central Texas
BREWSTER	8,681	Upper Rio Grande	LIPSCOMB	3,143	High Plains
BRISCOE	1,971	High Plains	LIVE OAK	9,556	South Texas
BROOKS	8,204	South Texas	LLANO	11,631	Central Texas
BURLESON	13,625	Central Texas	LOVING	107	West Texas
CALHOUN	19,053	South Texas	LYNN	6,758	High Plains
CALLAHAN	11,859	Northwest Texas	MADISON	10,931	Central Texas
CAMP	9,904	Upper East Texas	MARION	9,984	Upper East Texas
CARSON	6,576	High Plains	MARTIN	4,956	West Texas
CASTRO	9,070	High Plains	MASON	3,423	West Texas
CHILDRESS	5,953	High Plains	MCCULLOCH	8,778	West Texas
CLAY	10,024	Northwest Texas	MCMULLEN	817	South Texas
COCHRAN	4,377	High Plains	MENARD	2,252	West Texas
COKE	3,424	West Texas	MILLS	4,531	Central Texas
COLEMAN	9,710	Northwest Texas	MITCHELL	8,016	Northwest Texas
COLLINGSWORTH	3,573	High Plains	MONTAGUE	17,274	Northwest Texas
COLORADO	18,383	Gulf Coast	MOORE	17,865	High Plains
COMANCHE	13,381	Northwest Texas	MORRIS	13,200	Upper East Texas
CONCHO	3,044	West Texas	MOTLEY	1,532	High Plains
COTTLE	2,247	Northwest Texas	NEWTON	13,569	Southeast Texas
CRANE	4,652	West Texas	NOLAN	16,594	Northwest Texas
CROCKETT	4,078	West Texas	OCHILTREE	9,128	High Plains
CROSBY	7,304	High Plains	OLDHAM	2,278	High Plains
CULBERSON	3,407	Upper Rio Grande	PARMER	9,863	High Plains
DALLAM	5,461	High Plains	PECOS	14,675	West Texas
DAWSON	14,349	West Texas	PRESIDIO	6,637	Upper Rio Grande
DEAF SMITH	19,153	High Plains	RAINS	6,715	Upper East Texas
DELTA	4,857	Upper East Texas	REAGAN	4,514	West Texas
DE WITT	18,840	South Texas	REAL	2,412	South Texas
DICKENS	2,571	High Plains	RED RIVER	14,317	Upper East Texas
DIMMIT	10,433	South Texas	REEVES	15,852	West Texas
DONLEY	3,696	High Plains	REFUGIO	7,976	South Texas
DUVAL	12,918	South Texas	ROBERTS	1,025	High Plains
EASTLAND	18,488	Northwest Texas	ROBERTSON	15,511	Central Texas
EDWARDS	2,266	South Texas	RUNNELS	11,294	Northwest Texas
FALLS	17,712	Central Texas	SABINE	9,586	Southeast Texas
FISHER	4,842	Northwest Texas	SAN AUGUSTINE	7,999	Southeast Texas
FLOYD	8,497	High Plains	SAN JACINTO	16,372	Southeast Texas
FOARD	1,794	Northwest Texas	SAN SABA	5,401	Central Texas
FRANKLIN	7,802	Upper East Texas	SCHLEICHER	2,990	West Texas
FREESTONE	15,818	Central Texas	SCURRY	18,634	Northwest Texas
FRIO	13,472	South Texas	SHACKELFORD	3,316	Northwest Texas
GAINES	14,123	West Texas	SHERMAN	2,858	High Plains
GARZA	5,143	High Plains	SOMERVELL	5,360	Metroplex
GILLESPIE	17,204	South Texas	STEPHENS	9,010	Northwest Texas
GLASSCOCK	1,447	West Texas	STERLING	1,438	West Texas
GOLIAD	5,980	South Texas	STONEWALL	2,013	Northwest Texas
GONZALES	17,205	South Texas	SUTTON	4,135	West Texas
GRIMES	18,828	Central Texas	SWISHER	8,133	High Plains
HALL	3,905	High Plains	TERRELL	1,410	West Texas
HAMILTON	7,733	Central Texas	TERRY	13,218	High Plains
HANSFORD	5,848	High Plains	THROCKMORTON	1,880	Northwest Texas
HARDEMAN	5,283	Northwest Texas	TITUS	2,409	Upper East Texas
HARTLEY	3,634	High Plains	TRINITY	11,445	Southeast Texas
HASKELL	6,820	Northwest Texas	TYLER	16,646	Southeast Texas
HEMPHILL	3,720	High Plains	UPTON	4,447	West Texas
HUDSPETH	2,915	Upper Rio Grande	WARD	13,115	West Texas
IRION	1,629	West Texas	WHEELER	5,879	High Plains
JACK	6,981	Northwest Texas	WILBARGER	15,121	Northwest Texas
JACKSON	13,039	South Texas	WILLACY	17,705	South Texas
JEFF DAVIS	1,946	Upper Rio Grande	WINKLER	8,626	West Texas
JIM HOGG	5,109	South Texas	YOAKUM	8,786	High Plains
JONES	16,490	Northwest Texas	YOUNG	18,126	Northwest Texas
KARNES	12,455	South Texas	ZAPATA	9,279	South Texas
KENDALL	14,589	South Texas	ZAVALA	12,162	South Texas
KENEDY	460	South Texas			
Total population				1,300,029	

Other Counties

97 Counties with Population between 20,000 and 500,000

	Population	Region		Population	Region
ANDERSON	48,024	Upper East Texas	JOHNSON	97,165	Metroplex
ANGELINA	69,884	Southeast Texas	KAUFMAN	52,220	Metroplex
ATASCOSA	30,533	South Texas	KERR	36,304	South Texas
BASTROP	38,263	Central Texas	KLEBERG	30,274	South Texas
BEE	25,135	South Texas	LAMAR	43,989	Upper East Texas
BELL	191,088	Central Texas	LIBERTY	52,726	Gulf Coast
BOWIE	81,665	Upper East Texas	LIMESTONE	20,946	Central Texas
BRAZORIA	191,707	Gulf Coast	LUBBOCK	222,636	High Plains
BRAZOS	121,862	Central Texas	MATAGORDA	36,928	Gulf Coast
BROWN	34,371	Northwest Texas	MAVERICK	36,378	South Texas
BURNET	22,677	Central Texas	MCLENNAN	189,123	Central Texas
CALDWELL	26,392	Central Texas	MEDINA	27,312	South Texas
CAMERON	260,120	South Texas	MIDLAND	106,611	West Texas
CASS	29,982	Upper East Texas	MILAM	22,946	Central Texas
CHAMBERS	20,088	Gulf Coast	MONTGOMERY	182,201	Gulf Coast
CHEROKEE	41,049	Upper East Texas	NACOGDOCHES	54,753	Southeast Texas
COLLIN	264,036	Metroplex	NAVARRO	39,926	Metroplex
COMAL	51,832	South Texas	NUECES	291,145	South Texas
COOKE	30,777	Metroplex	ORANGE	80,509	Southeast Texas
CORYELL	64,213	Central Texas	PALO PINTO	25,055	Metroplex
DENTON	273,525	Metroplex	PANOLA	22,035	Upper East Texas
ECTOR	118,934	West Texas	PARKER	64,785	Metroplex
ELLIS	85,167	Metroplex	POLK	30,687	Southeast Texas
ERATH	27,991	Metroplex	POTTER	97,874	High Plains
FANNIN	24,804	Metroplex	RANDALL	89,673	High Plains
FAYETTE	20,095	Central Texas	ROCKWALL	25,604	Metroplex
FORT BEND	225,421	Gulf Coast	RUSK	43,735	Upper East Texas
GALVESTON	217,399	Gulf Coast	SAN PATRICIO	58,749	South Texas
GRAY	23,967	High Plains	SHELBY	22,034	Southeast Texas
GRAYSON	95,021	Metroplex	SMITH	151,309	Upper East Texas
GREGG	104,928	Upper East Texas	STARR	40,518	South Texas
GUADALUPE	64,873	South Texas	TAYLOR	119,655	Northwest Texas
HALE	34,671	High Plains	TOM GREEN	98,458	West Texas
HARDIN	41,320	Southeast Texas	UPSHUR	31,370	Upper East Texas
HARRISON	57,483	Upper East Texas	UVALDE	23,340	South Texas
HAYS	65,614	Central Texas	VAL VERDE	38,721	South Texas
HENDERSON	58,543	Upper East Texas	VAN ZANDT	37,944	Upper East Texas
HIDALGO	383,545	South Texas	VICTORIA	74,361	South Texas
HILL	27,146	Central Texas	WALKER	50,917	Gulf Coast
HOCKLEY	24,199	High Plains	WALLER	23,390	Gulf Coast
HOOD	28,981	Metroplex	WASHINGTON	26,154	Central Texas
HOPKINS	28,833	Upper East Texas	WEBB	133,239	South Texas
HOUSTON	21,375	Southeast Texas	WHARTON	39,955	Gulf Coast
HOWARD	32,343	West Texas	WICHITA	122,378	Northwest Texas
HUNT	64,343	Metroplex	WILLIAMSON	139,551	Central Texas
HUTCHINSON	25,689	High Plains	WILSON	22,650	South Texas
JASPER	31,102	Southeast Texas	WISE	34,679	Metroplex
JEFFERSON	239,397	Southeast Texas	WOOD	29,380	Upper East Texas
JIM WELLS	37,679	South Texas			
Total population				7,470,378	

Exhibit II

Public Utility Commission of Texas

June 30, 1994

LOCAL EXCHANGE COMPANY DATA REPORT

Due date: August 15, 1994

COMPANY NAME_____

CONTACT PERSON_____

TITLE_____

ADDRESS_____

_____

TELEPHONE_____

FAX_____

If you have any questions about the information being requested, call Todd Baker (512/458-0149) or Candice Clark (512/458-0332).

To identify metro, rural, and other counties, refer to the attached list of county population groups. In addition, we have attached a list of exchanges served by your company, showing the county location of each exchange according to our records.

1. Revenues

List customer-billed revenues for each service by county population group for the calendar quarters shown below.

A. Local Services

	REVENUES			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Basic Area				
Metro Counties				
Rural Counties				
Other Counites				
Optional Extended Area				
Metro Counties				
Rural Counties				
Other Counites				
Mandatory Extended Area				
Metro Counties				
Rural Counties				
Other Counites				
Expanded Local Calling				
Metro Counties				
Rural Counties				
Other Counites				
Extended Metro Service				
Metro Counties				
Rural Counties				
Other Counites				
Private line or virtual private line service				
Metro Counties				
Rural Counties				
Other Counites				
Cellular Mobile Retail				
Metro Counties				
Rural Counties				
Other Counites				
Cellular Mobile Interconnect				
Metro Counties				
Rural Counties				
Other Counites				
Other Mobile(includ. paging)				
Metro Counties				
Rural Counties				
Other Counites				

1. Revenues (con't)

A. Local Services (con't)

	REVENUES			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Public Pay Telephone				
Metro Counties				
Rural Counties				
Other Counites				
Private Pay Telephone				
Metro Counties				
Rural Counties				
Other Counites				
C.O. Based PBX-Type 75 Stations or more				
Metro Counties				
Rural Counties				
Other Counites				
C.O. Based PBX-Type fewer than 75 stations				
Metro Counties				
Rural Counties				
Other Counites				
Joint User				
Metro Counties				
Rural Counties				
Other Counites				
Customized Services				
Metro Counties				
Rural Counties				
Other Counites				
Enhanced Services				
Metro Counties				
Rural Counties				
Other Counites				
Custom Calling Features				
Metro Counties				
Rural Counties				
Other Counites				
Billing and Collection Service				
Metro Counties				
Rural Counties				
Other Counites				

1. Revenues (con't)

A. Local Services (con't)

	REVENUES			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Non Voice Data Transmission Service				
Metro Counties				
Rural Counties				
Other Counites				
Dark Fiber Service				
Metro Counties				
Rural Counties				
Other Counites				
Any other Local Service				
Metro Counties				
Rural Counties				
Other Counites				

B. Network Access Services (Interstate)

	INTERSTATE REVENUES			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
End User				
Metro Counties				
Rural Counties				
Other Counites				
Carrier Common Line				
Metro Counties				
Rural Counties				
Other Counites				
Local Switching				
Metro Counties				
Rural Counties				
Other Counites				
Local Transport				
Metro Counties				
Rural Counties				
Other Counites				
Special Access				
Metro Counties				
Rural Counties				
Other Counites				

C. Network Access Services (Intrastate)

	INTRASTATE REVENUES			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
End User				
Metro Counties				
Rural Counties				
Other Counites				
Carrier Common Line				
Metro Counties				
Rural Counties				
Other Counites				
Local Switching				
Metro Counties				
Rural Counties				
Other Counites				
Local Transport				
Metro Counties				
Rural Counties				
Other Counites				
Special Access				
Metro Counties				
Rural Counties				
Other Counites				

1. Revenues (con't)

D. Long Distance Services

	REVENUES			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
IntraLATA MTS				
Metro Counties				
Rural Counties				
Other Counites				
IntraLATA 800				
Metro Counties				
Rural Counties				
Other Counites				
IntraLATA WATS				
Metro Counties				
Rural Counties				
Other Counites				

2. Number of Customers

List the number of customers for each service by county population group for the calendar quarters shown below.

A. Number of Residential Customers for Local Services

	Number of Residential Customers			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Basic Area				
Metro Counties				
Rural Counties				
Other Counites				
Optional Extended Area				
Metro Counties				
Rural Counties				
Other Counites				
Mandatory Extended Area				
Metro Counties				
Rural Counties				
Other Counites				
Expanded Local Calling				
Metro Counties				
Rural Counties				
Other Counites				
Extended Metro Service				
Metro Counties				
Rural Counties				
Other Counites				
Private line or virtual private line service				
Metro Counties				
Rural Counties				
Other Counites				
Cellular Mobile Retail				
Metro Counties				
Rural Counties				
Other Counites				
Other Mobile(includ. paging)				
Metro Counties				
Rural Counties				
Other Counites				

2. Number of Customers (con't)

A. Number of Residential Customers for Local Services (con't)

	Number of Residential Customers			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Customized Services				
Metro Counties				
Rural Counties				
Other Counites				
Enhanced Services				
Metro Counties				
Rural Counties				
Other Counites				
Custom Calling Features				
Metro Counties				
Rural Counties				
Other Counites				
Non Voice Data Transmission Service				
Metro Counties				
Rural Counties				
Other Counites				
Special Access Service				
Metro Counties				
Rural Counties				
Other Counites				
Any other Local Service				
Metro Counties				
Rural Counties				
Other Counites				

2. Number of Customers (con't)

List the number of customers for each service by county population group for the calendar quarters shown below.

B. Number of Business Customers for Local Services

	Number of Business Customers			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Basic Area				
Metro Counties				
Rural Counties				
Other Counites				
Optional Extended Area				
Metro Counties				
Rural Counties				
Other Counites				
Mandatory Extended Area				
Metro Counties				
Rural Counties				
Other Counites				
Expanded Local Calling				
Metro Counties				
Rural Counties				
Other Counites				
Extended Metro Service				
Metro Counties				
Rural Counties				
Other Counites				
Private line or virtual private line service				
Metro Counties				
Rural Counties				
Other Counites				
Cellular Mobile Retail				
Metro Counties				
Rural Counties				
Other Counites				
Cellular Mobile Interconnect				
Metro Counties				
Rural Counties				
Other Counites				
Other Mobile(includ. paging)				
Metro Counties				
Rural Counties				
Other Counites				

2. Number of Customers (con't)

B. Number of Business Customers for Local Services (con't)

	Number of Business Customers			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Public Pay Telephone				
Metro Counties				
Rural Counties				
Other Counites				
Private Pay Telephone				
Metro Counties				
Rural Counties				
Other Counites				
C.O. Based PBX-Type 75 Stations or more				
Metro Counties				
Rural Counties				
Other Counites				
C.O. Based PBX-Type fewer than 75 stations				
Metro Counties				
Rural Counties				
Other Counites				
Joint User				
Metro Counties				
Rural Counties				
Other Counites				
Customized Services				
Metro Counties				
Rural Counties				
Other Counites				
Enhanced Services				
Metro Counties				
Rural Counties				
Other Counites				
Custom Calling Features				
Metro Counties				
Rural Counties				
Other Counites				
Billing and Collection Service				
Metro Counties				
Rural Counties				
Other Counites				

2. Number of Customers (con't)

B. Number of Business Customers for Local Service (con't)

	Number of Business Customers			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Non Voice Data Transmission Service				
Metro Counties				
Rural Counties				
Other Counites				
Dark Fiber Service				
Metro Counties				
Rural Counties				
Other Counites				
Special Access Service				
Metro Counties				
Rural Counties				
Other Counites				
Any other Local Service				
Metro Counties				
Rural Counties				
Other Counites				

2. Number of Customers (con't)

C. Number of Residential Customers for Long Distance Services

	Number of Residential Customers			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
IntraLATA 800 Metro Counties				
Rural Counties				
Other Counites				
IntraLATA WATS Metro Counties				
Rural Counties				
Other Counites				

D. Number of Business Customers for Long Distance Service

	Number of Business Customers			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
IntraLATA 800 Metro Counties				
Rural Counties				
Other Counites				
IntraLATA WATS Metro Counties				
Rural Counties				
Other Counites				

3. Originating Access Minutes of Use (MOU)

List intrastate originating access minutes of use by interexchange carrier and by county population group for the calendar quarters shown below.

IXCs	INTRASTATE LOCAL SWITCHING ORIGINATING ACCESS MOU (thousands of minutes)			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Metro Counties				
AT&T				
MCI				
Sprint				
LDDS/Metromedia				
Vartec				
Cable & Wireless				
All Other				
Rural Counties				
AT&T				
MCI				
Sprint				
LDDS/Metromedia				
Vartec				
Cable & Wireless				
All Other				
Other Counties				
AT&T				
MCI				
Sprint				
LDDS/Metromedia				
Vartec				
Cable & Wireless				
All Other				

For each service listed below, please provide the following information:

4. a. Identify and estimate the market share of known competitors for this service in metro counties.

   b. Identify and estimate the market share of known competitors for this service in rural counties.

   c. Identify and estimate the market share of known competitors for this service in other counties.

5. a. Identify or describe potential competitors for this service in metro counties.

   b. Identify or describe potential competitors for this service in rural counties.

   c. Identify or describe potential competitors for this service in other counties.

6. Describe any legal, technical or economic barriers to enter the market for this service. If these barriers are not present throughout the state, please indicate if they are present in metro, rural, or other counties.

Services

A. Local Network Services

Basic area service	Private line service
Cellular mobile	Other mobile (including paging)
Public pay telephone	C.O.-based PBX-type services
Joint user services	Customized services
Enhanced services	Custom calling features
Billing and collection service	Non voice data transmission service
Dark fiber service	Any other local service

B. Network Access Services

Switched access
Special access

C. Long Distance Services

IntraLATA MTS	IntraLATA 800
IntraLATA WATS	

Exhibit III

Texas LECs	Type	Access Lines as of 12/31/93
Southwestern Bell Telephone Co.	IOU	7,674,453
General Telephone Co.	IOU	1,404,964
Continental Telephone (GTE)	IOU	190,657
Central Telephone Co.	IOU	157,663
United Telephone Co.	IOU	123,483
Lufkin-Conroe Telephone Co.	IOU	74,518
Sugar Land Telephone Co.	IOU	43,521
Century Telephone of San Marcos	IOU	23,827
Fort Bend Telephone Co.	IOU	22,411
Texas ALLTEL Telephone Co.	IOU	18,791
Kerrville Telephone Co.	IOU	17,279
Lake Dallas Telephone Co.	IOU	5,177
Brazoria Telephone Co.	IOU	5,143
Livingston Telephone Co.	IOU	4,984
Comanche County Telephone Co	IOU	4,976
Big Bend Telephone Co.	IOU	3,780
ALLTEL Texas Telephone Co.	IOU	3,384
Southwest Texas Telephone Co.	IOU	3,176
Mustang Telephone Co.	IOU	3,134
Muenster Telephone Co.	IOU	2,935
Cap Rock Telephone Co.	IOU	2,445
Electra Telephone Co.	IOU	1,707
Industry Telephone Co.	IOU	1,638
Community Telephone Co.	IOU	1,548
Ganado Telephone Co.	IOU	1,333
Blossom Telephone Co.	IOU	1,156
Lake Livingston Telephone Co.	IOU	1,070
Cameron Telephone Co.	IOU	1,058
La Ward Telephone Exchange Co.	IOU	1,030
Riviera Telephone Co.	IOU	984
Lipan Telephone Co.	IOU	982
Tatum Telephone Exchange Co.	IOU	795
North Texas Telephone Co.	IOU	774
Alenco Communications	IOU	611
Border-To-Border Telephone Co.	IOU	0
Caddoan Telephone Co.	IOU	
Eastex Telephone Co-Op	Co-op	23,544
Guadalupe Valley Telephone Co-Op	Co-op	19,893
Hill Country Telephone Co-Op	Co-op	10,776
Etex Telephone Co-Op	Co-op	10,272
Peoples Telephone Co-Op	Co-op	8,066
Taylor Telephone Co-Op	Co-op	5,558
Colorado Valley Telephone Co-Op	Co-op	5,416
Valley Telephone Co-Op	Co-op	5,056
South Plains Telephone Co-Op	Co-op	4,010
Central Texas Telephone Co-Op	Co-op	3,691
Poka-Lambro Rural Telephone Co-Op	Co-op	3,446
Wes-Tex Telephone Co-Op	Co-op	3,088
Mid-Plains Telephone Co-Op	Co-op	2,220
Coleman County Telephone Co-Op	Co-op	1,856
West Texas Rural Telephone Co-Op	Co-op	1,839
Santa Rosa Telephone Co-Op	Co-op	1,566
Five Area Telephone Co-Op	Co-op	1,433
XIT Rural Telephone Co-Op	Co-op	1,106
Brazos Telephone Co-Op	Co-op	1,101
Cumby Telephone Co-Op	Co-op	586
Dell Telephone Co-Op	Co-op	554
SW Arkansas Telephone Co-Op	Co-op	463
E.N.M.R. Telephone Co-Op	Co-op	49
Panhandle Telephone Co-Op	Co-op	37
Leaco Rural Telephone Co-Op	Co-op	

Exhibit IV

LOCAL EXCHANGE CARRIER REVENUES

BASIC AREA SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$6,454,651	$5,311,064	(17.7%)
Other Counties	$6,623,265	$6,970,616	5.2%
Total	$13,077,916	$12,281,680	(6.1%)

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$869,366,767	$905,871,774	4.2%
Rural Counties	$62,731,530	$77,968,386	24.3%
Other Counties	$438,485,196	$488,373,457	11.4%
Total	$1,370,583,493	$1,472,213,617	7.4%

EXTENDED AREA SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$506,516	$613,004	21.0%
Other Counties	$939,589	$1,170,712	24.6%
Total	$1,446,105	$1,783,716	23.3%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$122,735,691	$127,996,581	4.3%
Rural Counties	$13,337,264	$15,946,642	19.6%
Other Counties	$71,514,404	$92,299,267	29.1%
Total	$207,587,359	$236,242,490	13.8%

PRIVATE LINE SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$45,250	$52,609	16.3%
Other Counties	$200,347	$191,795	(4.3%)
Total	$245,597	$244,404	(0.5%)

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$63,057,641	$56,257,561	(10.8%)
Rural Counties	$5,764,818	$6,514,111	13.0%
Other Counties	$25,967,479	$29,750,483	14.6%
Total	$94,789,938	$92,522,155	(2.4%)

DARK FIBER SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$0	$0	--
Total	$0	$0	--

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$3,017,974	$4,113,562	36.3%
Rural Counties	$0	$0	--
Other Counties	$1,793,391	$12,744	(99.3%)
Total	$4,811,365	$4,126,306	(14.2%)

NON-VOICE DATA TRANSMISSION SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$637	$789	23.9%
Total	$637	$789	23.9%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$3,432,484	$3,060,836	(10.8%)
Rural Counties	$142,096	$227,294	6--
Other Counties	$2,671,073	$2,673,427	0.1%
Total	$6,245,653	$5,961,557	(4.5%)

CELLULAR MOBILE INTERCONNECT SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$50,821	$52,663	3.6%
Other Counties	$46,168	$54,757	18.6%
Total	$96,989	$107,420	10.8%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$3,760,440	$3,880,935	3.2%
Rural Counties	$446,312	$571,437	28.0%
Other Counties	$28,729,652	$28,543,836	(0.6%)
Total	$32,936,404	$32,996,208	0.2%

OTHER MOBILE SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$97,303	$80,123	(17.7%)
Other Counties	$0	$0	--
Total	$97,303	$80,123	(17.7%)

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$182,560	$167,090	(8.5%)
Rural Counties	$22,355	$21,557	(3.6%)
Other Counties	$181,311	$258,530	42.6%
Total	$386,226	$447,177	15.8%

PUBLIC AND SEMI-PUBLIC PAY TELEPHONE SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Total	$39,542	$27,005	(31.7%)

IOUs	1992-93	1993-94	Percent Growth
Total	$123,094,998	$125,336,034	1.8%

PRIVATE PAY TELEPHONE SERVICE REVENUES
(LEC revenues from provision of local service access lines)

Co-ops	1992-93	1993-94	Percent Growth
Total	$80,351	$107,291	33.5%

IOUs	1992-93	1993-94	Percent Growth
Total	$16,228,925	$25,400,333	56.5%

C.O.-BASED PBX TYPE SERVICE MORE OF 75 STATIONS OR MORE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$0	$0	--
Total	$0	$0	--

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$26,831,300	$25,935,408	(3.3%)
Rural Counties	$623,076	$984,135	57.9%
Other Counties	$7,579,274	$9,393,188	23.9%
Total	$35,033,650	$36,312,731	3.7%

C.O.-BASED PBX TYPE SERVICE FEWER THAN 75 STATIONS REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$5,613	$5,728	2.0%
Other Counties	$0	$0	--
Total	$5,613	$5,728	2.0%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$23,268,989	$25,821,039	11.0%
Rural Counties	$1,106,435	$1,208,116	9.2%
Other Counties	$6,039,414	$8,565,943	41.8%
Total	$30,414,838	$35,595,098	17.0%

JOINT USER SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$0	$0	--
Total	$0	$0	--

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$365,315	$437,661	19.8%
Rural Counties	$3,171	$4,882	54.0%
Other Counties	$53,940	$58,626	8.7%
Total	$422,426	$501,169	18.6%

CUSTOMIZED SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$9,623	$13,148	36.6%
Other Counties	$18,897	$34,328	81.7%
Total	$28,520	$47,476	66.5%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$61,649	$2,070,829	3259.1%
Rural Counties	$1,016	$0	(10--)
Other Counties	$5,560	$14,075	153.1%
Total	$68,225	$2,084,904	2955.9%

ENHANCED SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$9,176	$10,590	15.4%
Other Counties	$111,680	$124,759	11.7%
Total	$120,856	$135,349	12.0%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$1,193,919	$4,154,248	248.0%
Rural Counties	$35,004	$39,287	12.2%
Other Counties	$315,855	$404,815	28.2%
Total	$1,544,778	$4,598,350	197.7%

CUSTOM CALLING SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$329,733	$395,467	19.9%
Other Counties	$506,479	$570,900	12.7%
Total	$836,212	$966,367	15.6%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$133,319,823	$151,474,816	13.6%
Rural Counties	$3,629,869	$5,269,836	45.2%
Other Counties	$88,417,778	$76,638,574	(13.3%)
Total	$225,367,470	$233,383,226	3.6%

BILLING AND COLLECTION SERVICE REVENUES

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$591,772	$682,030	15.3%
Other Counties	$864,631	$1,016,878	17.6%
Total	$1,456,403	$1,698,908	16.7%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	$133,319,823	$151,474,816	13.6%
Rural Counties	$3,629,869	$5,269,836	45.2%
Other Counties	$88,417,778	$76,638,574	(13.3%)
Total	$225,367,470	$233,383,226	3.6%

SWITCHED ACCESS (CO-OPs)

i) Interstate Revenues

	1992-93	1993-94	Percent Growth
End User			
Metro Counties	$0	$0	--
Rural Counties	$1,744,269	$1,775,228	1.8%
Other Counties	$2,297,836	$2,388,977	4.0%
Total	$4,042,105	$4,164,205	3.0%
Carrier Common Line			
Metro Counties	$0	$0	--
Rural Counties	$789,279	$737,554	(6.6%)
Other Counties	$947,351	$1,186,690	25.3%
Total	$1,736,630	$1,924,244	10.8%
Local Switching			
Metro Counties	$0	$0	--
Rural Counties	$2,518,314	$2,932,665	16.5%
Other Counties	$3,532,032	$4,534,612	28.4%
Total	$6,050,346	$7,467,277	23.4%
Local Transport			
Metro Counties	$0	$0	--
Rural Counties	$1,311,015	$1,520,457	16.0%
Other Counties	$1,549,675	$1,821,387	17.5%
Total	$2,860,690	$3,341,844	16.8%
Other Switched Access			
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$0	$0	--
Total	$0	$0	--
Total Interstate Access			
Metro Counties	$0	$0	--
Rural Counties	$6,362,877	$6,965,904	9.5%
Other Counties	$8,326,894	$9,931,666	19.3%
Total	$14,689,771	$16,897,570	15.0%

ii) Intrastate Revenues

	1992-93	1993-94	Percent Growth
End User			
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$0	$0	--
Total	$0	$0	--
Carrier Common Line			
Metro Counties	$0	$0	--
Rural Counties	$5,548,841	$4,601,464	(17.1%)
Other Counties	$6,026,936	$5,955,726	(1.2%)
Total	$11,575,777	$10,557,190	(8.8%)
Local Switching			
Metro Counties	$0	$0	--
Rural Counties	$885,124	$852,828	(3.6%)
Other Counties	$1,107,855	$1,118,418	1.0%
Total	$1,992,979	$1,971,246	(1.1%)
Local Transport			
Metro Counties	$0	$0	--
Rural Counties	$795,748	$746,658	(6.2%)
Other Counties	$844,801	$832,183	(1.5%)
Total	$1,640,549	$1,578,841	(3.8%)
Other Switched Access			
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$0	$0	--
Total	$0	$0	--
Total Intrastate Access			
Metro Counties	$0	$0	--
Rural Counties	$7,229,712	$6,200,951	(14.2%)
Other Counties	$7,979,592	$7,906,327	(0.9%)
Total	$15,209,304	$14,107,278	(7.2%)

iii) Combined Access

	1992-93	1993-94	Percent Growth
End User			
Metro Counties	$0	$0	--
Rural Counties	$1,744,269	$1,775,228	1.8%
Other Counties	$2,297,836	$2,388,977	4.0%
Total	$4,042,105	$4,164,205	3.0%
Carrier Common Line			
Metro Counties	$0	$0	--
Rural Counties	$6,338,120	$5,339,019	(15.8%)
Other Counties	$6,974,287	$7,142,416	2.4%
Total	$13,312,407	$12,481,435	(6.2%)
Local Switching			
Metro Counties	$0	$0	--
Rural Counties	$3,403,437	$3,785,493	11.2%
Other Counties	$4,639,887	$5,653,030	21.8%
Total	$8,043,324	$9,438,523	17.3%
Local Transport			
Metro Counties	$0	$0	--
Rural Counties	$2,106,763	$2,267,115	7.6%
Other Counties	$2,394,476	$2,653,570	10.8%
Total	$4,501,239	$4,920,685	9.3%
Other Switched Access			
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$0	$0	--
Total	$0	$0	--
Total Access			
Metro Counties	$0	$0	--
Rural Counties	$13,592,589	$13,166,855	(3.1%)
Other Counties	$16,306,486	$17,837,993	9.4%
Total	$29,899,075	$31,004,848	3.7%

SWITCHED ACCESS (IOUs)

i) Interstate Revenues

	1992-93	1993-94	Percent Growth
End User			
Metro Counties	$223,210,615	$255,822,867	14.6%
Rural Counties	$24,485,149	$30,902,677	26.2%
Other Counties	$141,322,405	$165,634,350	17.2%
Total	$389,018,169	$452,359,894	16.3%
Carrier Common Line			
Metro Counties	$97,066,067	$129,943,030	33.9%
Rural Counties	$11,531,713	$20,359,879	76.6%
Other Counties	$145,684,817	$94,475,564	(35.2%)
Total	$254,282,597	$244,778,473	(3.7%)
Local Switching			
Metro Counties	$112,586,686	$116,765,377	3.7%
Rural Counties	$14,843,467	$18,327,118	23.5%
Other Counties	$80,979,679	$82,560,267	2.0%
Total	$208,409,832	$217,652,762	4.4%
Local Transport			
Metro Counties	$97,995,156	$96,595,113	(1.4%)
Rural Counties	$15,926,182	$16,824,252	5.6%
Other Counties	$90,930,803	$132,236,846	45.4%
Total	$204,852,141	$245,656,211	19.9%
Other Switched Access			
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$1,500	$1,281	(14.6%)
Total	$1,500	$1,281	(14.6%)
Total Interstate Access			
Metro Counties	$530,858,524	$599,126,387	12.9%
Rural Counties	$66,786,510	$86,413,926	29.4%
Other Counties	$458,919,205	$474,908,308	3.5%
Total	$1,056,564,239	$1,160,448,621	9.8%

ii) Intrastate Revenues

	1992-93	1993-94	Percent Growth
End User			
Metro Counties	$3,632	$4,760	31.1%
Rural Counties	$77,302	$70,854	(8.3%)
Other Counties	$1,667	$2,324	39.4%
Total	$82,601	$77,938	(5.6%)
Carrier Common Line			
Metro Counties	$244,336,257	$254,732,634	4.3%
Rural Counties	$32,183,173	$47,491,977	47.6%
Other Counties	$213,089,164	$249,824,573	17.2%
Total	$489,608,594	$552,049,184	12.8%
Local Switching			
Metro Counties	$82,089,524	$73,719,788	(10.2%)
Rural Counties	$15,077,755	$18,106,205	20.1%
Other Counties	$87,132,640	$81,950,846	(5.9%)
Total	$184,299,919	$173,776,839	(5.7%)
Local Transport			
Metro Counties	$49,212,827	$48,585,501	(1.3%)
Rural Counties	$10,031,388	$14,412,752	43.7%
Other Counties	$65,022,912	$71,858,287	10.5%
Total	$124,267,127	$134,856,540	8.5%
Other Switched Access			
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$27,692	$17,876	(35.4%)
Total	$27,692	$17,876	(35.4%)
Total Intrastate Access			
Metro Counties	$375,642,240	$377,042,683	0.4%
Rural Counties	$57,369,618	$80,081,787	39.6%
Other Counties	$365,274,075	$403,653,907	10.5%
Total	$798,285,933	$860,778,377	7.8%

iii) Combined Access

	1992-93	1993-94	Percent Growth
End User			
Metro Counties	$223,214,247	$255,827,627	14.6%
Rural Counties	$24,562,451	$30,973,531	26.1%
Other Counties	$141,324,072	$165,636,674	17.2%
Total	$389,100,770	$452,437,832	16.3%
Carrier Common Line			
Metro Counties	$341,402,324	$384,675,664	12.7%
Rural Counties	$43,714,886	$67,851,855	55.2%
Other Counties	$358,773,981	$344,300,138	(4.0%)
Total	$743,891,191	$796,827,657	7.1%
Local Switching			
Metro Counties	$194,676,210	$190,485,165	(2.2%)
Rural Counties	$29,921,221	$36,433,323	21.8%
Other Counties	$168,112,320	$164,511,113	(2.1%)
Total	$392,709,751	$391,429,601	(0.3%)
Local Transport			
Metro Counties	$147,207,983	$145,180,614	(1.4%)
Rural Counties	$25,957,569	$31,237,004	20.3%
Other Counties	$155,953,716	$204,095,133	30.9%
Total	$329,119,268	$380,512,751	15.6%
Other Switched Access			
Metro Counties	$0	$0	--
Rural Counties	$0	$0	--
Other Counties	$29,192	$19,157	(34.4%)
Total	$29,192	$19,157	(34.4%)
Total Access			
Metro Counties	$906,500,764	$976,169,070	7.7%
Rural Counties	$124,156,128	$166,495,713	34.1%
Other Counties	$824,193,280	$878,562,215	6.6%
Total	$1,854,850,172	$2,021,226,998	9.0%

SPECIAL ACCESS REVENUES

i) Co-ops

Interstate	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$137,430	$142,790	3.9%
Other Counties	$71,595	$94,023	31.3%
Total	$209,025	$236,813	13.3%

Intrastate	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$126,499	$155,344	22.8%
Other Counties	$219,423	$230,513	5.1%
Total	$345,922	$385,857	11.5%

Combined	1992-93	1993-94	Percent Growth
Metro Counties	$0	$0	--
Rural Counties	$263,929	$298,134	13.0%
Other Counties	$291,018	$324,536	11.5%
Total	$554,947	$622,670	12.2%

ii) IOUs

Interstate	1992-93	1993-94	Percent Growth
Metro Counties	$128,138,475	$140,339,818	9.5%
Rural Counties	$4,707,779	$7,588,013	61.2%
Other Counties	$69,740,882	$79,438,072	13.9%
Total	$202,587,136	$227,365,903	12.2%

Intrastate	1992-93	1993-94	Percent Growth
Metro Counties	$22,743,365	$22,325,738	(1.8%)
Rural Counties	$4,385,129	$5,428,412	23.8%
Other Counties	$17,772,044	$16,614,086	(6.5%)
Total	$44,900,538	$44,368,236	(1.2%)

Combined	1992-93	1993-94	Percent Growth
Metro Counties	$150,881,840	$162,665,556	7.8%
Rural Counties	$9,092,908	$13,016,425	43.1%
Other Counties	$87,512,926	$96,052,158	9.8%
Total	$247,487,674	$271,734,139	9.8%

LOCAL EXCHANGE CARRIER CUSTOMERS

BASIC AREA SERVICE CUSTOMERS

I) Residential

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	40,231	41,579	3.4%
Other Counties	98,801	102,268	3.5%
Total	139,032	143,847	3.5%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	4,096,457	4,127,658	0.8%
Rural Counties	1,567,031	1,743,283	11.2%
Other Counties	4,343,593	4,407,432	1.5%
Total	10,007,081	10,278,372	2.7%

II) Business

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	6,062	6,572	8.4%
Other Counties	10,471	11,440	9.3%
Total	16,533	18,012	8.9%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	445,891	453,141	1.6%
Rural Counties	221,776	222,560	0.4%
Other Counties	565,225	423,011	(25.2%)
Total	1,232,891	1,098,711	(10.9%)

EXTENDED AREA SERVICE CUSTOMERS

I) Residential

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	16,220	17,125	5.6%
Other Counties	47,711	49,713	4.2%
Total	63,931	66,837	4.5%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	1,491,223	1,434,635	(3.8%)
Rural Counties	880,095	858,491	(2.5%)
Other Counties	2,278,791	2,250,385	(1.2%)
Total	4,650,109	4,543,511	(2.3%)

II) Business

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	2,427	2,654	9.4%
Other Counties	4,868	5,379	10.5%
Total	7,294	8,033	10.1%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	146,550	156,541	6.8%
Rural Counties	137,047	130,879	(4.5%)
Other Counties	285,030	277,958	(2.5%)
Total	568,626	565,378	(0.6%)

PRIVATE LINE SERVICE CUSTOMERS

I) Residential

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	13	13	--
Other Counties	4	4	--
Total	17	17	--

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	2,151	2,091	(2.8%)
Rural Counties	9,495	8,963	(5.6%)
Other Counties	12,386	11,662	(5.8%)
Total	24,031	22,716	(5.5%)

II) Business

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	134	147	10.1%
Other Counties	228	274	20.2%
Total	362	421	16.5%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	24,554	23,987	(2.3%)
Rural Counties	39,186	35,953	(8.2%)
Other Counties	63,777	58,659	(8.0%)
Total	127,516	118,599	(7.0%)

NON-VOICE DATA TRANSMISSION SERVICE CUSTOMERS

I) Residential

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	0	0	--
Other Counties	0	0	--
Total	0	0	--

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	402	370	(8.0%)
Rural Counties	35	52	49.3%
Other Counties	596	586	(1.7%)
Total	1,032	1,007	(2.4%)

II) Business

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	1	1	--
Other Counties	2	6	20--
Total	3	7	133.3%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	3,894	3,429	(11.9%)
Rural Counties	640	826	29.2%
Other Counties	4,681	4,925	5.2%
Total	9,214	9,180	(0.4%)

OTHER MOBILE SERVICE CUSTOMERS

I) Residential

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	8	4	(5--)
Other Counties	0	0	--
Total	8	4	(5--)

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	95	94	(0.5%)
Other Counties	3	2	(2--)
Total	97	96	(1.0%)

II) Business

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	197	161	(18.3%)
Other Counties	12	12	--
Total	209	173	(17.2%)

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	102	99	(3.4%)
Other Counties	447	389	(12.9%)
Total	549	488	(11.1%)

PUBLIC AND SEMI PUBLIC PAY TELEPHONE STATIONS

Co-ops	1992-93	1993-94	Percent Growth
Total	460	446	(3.0%)

IOUs	1992-93	1993-94	Percent Growth
Total	113,395	114,753	1.2%

PRIVATE PAY TELEPHONE STATIONS

Co-ops	1992-93	1993-94	Percent Growth
Total	305	419	37.6%

IOUs	1992-93	1993-94	Percent Growth
Total	29,362	37,428	27.5%

JOINT USER SERVICE CUSTOMERS

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	0	0	--
Other Counties	0	0	--
Total	0	0	--

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	760	742	(2.4%)
Rural Counties	39	54	37.2%
Other Counties	501	475	(5.3%)
Total	1,300	1,270	(2.3%)

CUSTOMIZED SERVICE CUSTOMERS

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	85	88	3.5%
Other Counties	53	62	16.0%
Total	138	150	8.3%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	913	1,642	79.9%
Rural Counties	26	28	5.8%
Other Counties	4	7	10--
Total	942	1,677	78.0%

ENHANCED SERVICE CUSTOMERS

I) Residential

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	2,197	2,550	16.1%
Other Counties	27,173	30,437	12.0%
Total	29,369	32,987	12.3%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	1,951	2,547	30.6%
Rural Counties	356	381	6.9%
Other Counties	5,885	6,476	1--
Total	8,192	9,403	14.8%

II) Business

Co-ops	1992-93	1993-94	Percent Growth
Metro Counties	0	0	--
Rural Counties	278	348	25.0%
Other Counties	2,473	2,691	8.8%
Total	2,751	3,038	10.4%

IOUs	1992-93	1993-94	Percent Growth
Metro Counties	679	877	29.2%
Rural Counties	63	75	19.2%
Other Counties	701	865	23.3%
Total	1,442	1,816	25.9%

Exhibit V

PERCENTAGE OF HOUSEHOLDS WITH TELEPHONE SERVICE

	ANNUAL AVERAGE				
	1984 Unit	1985 Unit	1986 Unit	1987 Unit	1988 Unit
UNITED STATES	91.6	91.8	92.3	92.4	92.7
ALABAMA	88.4	89.1	88.7	87.5	87.3
ALASKA	86.5	87.1	86.4	87.8	87.6
ARIZONA	86.9	87.3	89.4	88.6	90.6
ARKANSAS	86.6	85.9	86.4	86.3	86.1
CALIFORNIA	92.5	92.9	93.0	93.8	94.4
COLORADO	93.2	94.3	94.1	92.9	93.8
CONNECTICUT	95.5	96.2	97.0	97.0	96.3
DELAWARE	94.3	94.8	94.7	96.5	97.0
DIST OF COLUMBIA	94.9	93.6	92.2	92.4	94.6
FLORIDA	88.7	89.6	90.0	91.7	92.7
GEORGIA	86.2	87.6	88.4	88.7	90.1
HAWAII	93.5	93.0	92.2	94.2	94.5
IDAHO	90.7	91.8	91.5	91.1	92.2
ILLINOIS	94.2	93.7	93.6	93.7	94.2
INDIANA	91.6	92.3	92.2	91.2	92.3
IOWA	96.2	95.1	95.7	95.1	95.4
KANSAS	94.3	94.4	94.6	95.2	94.4
KENTUCKY	88.1	87.4	86.2	86.5	87.5
LOUISIANA	89.7	90.3	88.7	87.5	87.3
MAINE	93.4	94.0	93.4	93.5	94.2
MARYLAND	95.7	95.5	95.7	95.4	95.9
MASSACHUSETTS	95.9	95.2	96.4	96.4	96.9
MICHIGAN	92.8	92.9	93.4	93.7	93.9
MINNESOTA	95.8	96.4	96.2	96.0	97.2
MISSISSIPPI	82.4	80.9	80.1	81.5	83.3
MISSOURI	91.5	92.5	93.4	93.0	93.5
MONTANA	91.0	91.4	90.9	90.9	91.7
NEBRASKA	95.7	95.3	95.6	94.6	95.4
NEVADA	90.4	91.8	92.4	92.4	92.4
NEW HAMPSHIRE	94.3	93.2	94.0	94.1	95.2
NEW JERSEY	94.8	94.9	94.9	95.0	94.4
NEW MEXICO	82.0	84.1	85.1	86.0	85.7
NEW YORK	91.8	92.1	93.2	92.7	92.4
NORTH CAROLINA	88.3	89.4	90.2	89.2	90.4
NORTH DAKOTA	94.6	95.3	96.1	96.8	96.8
OHIO	92.4	92.2	93.1	93.4	94.4
OKLAHOMA	90.3	88.8	90.4	88.7	88.9
OREGON	90.6	90.3	92.7	93.3	92.0
PENNSYLVANIA	94.9	95.3	96.3	96.4	96.2
RHODE ISLAND	93.6	94.0	95.9	95.2	95.4
SOUTH CAROLINA	83.7	86.8	86.3	87.7	88.5
SOUTH DAKOTA	93.2	92.6	92.6	92.8	92.9
TENNESSEE	88.5	89.3	89.6	89.2	90.3
TEXAS	88.4	88.1	88.9	89.5	88.5
UTAH	92.5	93.9	93.0	92.3	92.5
VERMONT	92.3	92.9	93.8	95.3	95.6
VIRGINIA	93.1	91.7	92.1	92.5	92.9
WASHINGTON	93.0	94.7	94.6	94.3	94.3
WEST VIRGINIA	87.7	87.6	88.2	87.8	87.3
WISCONSIN	95.2	94.1	95.1	96.4	97.0
WYOMING	89.9	93.4	92.1	92.3	93.0

PERCENTAGE OF HOUSEHOLDS WITH TELEPHONE SERVICE

	ANNUAL AVERAGE				
	1989 Unit	1990 Unit	1991 Unit	1992 Unit	1993 Unit
UNITED STATES	93.1	93.3	93.4	93.8	94.2
ALABAMA	89.0	89.5	91.4	90.8	91.9
ALASKA	86.8	89.3	90.8	91.7	89.9
ARIZONA	91.6	93.0	93.4	93.3	93.3
ARKANSAS	87.5	88.7	87.6	87.3	87.8
CALIFORNIA	94.9	94.6	95.0	95.6	95.8
COLORADO	94.6	94.7	95.4	95.5	96.1
CONNECTICUT	98.1	97.1	96.2	96.6	96.7
DELAWARE	96.6	86.0	96.4	96.5	96.5
DIST OF COLUMBIA	92.7	91.4	90.9	88.7	90.2
FLORIDA	92.9	93.0	93.3	93.5	93.8
GEORGIA	90.2	90.9	89.9	90.2	93.2
HAWAII	95.1	95.3	95.1	95.3	94.4
IDAHO	92.5	92.8	92.0	93.0	94.4
ILLINOIS	93.9	94.3	93.8	93.8	93.6
INDIANA	93.2	92.8	92.2	91.9	93.7
IOWA	96.3	96.1	95.6	95 4	96.4
KANSAS	94.4	95.4	94.5	95.2	95.6
KENTUCKY	88.9	89.1	88.1	89.6	89.8
LOUISIANA	88.6	89.4	91.1	91.7	90.4
MAINE	95.3	95.7	94.4	93.2	96.0
MARYLAND	95.0	95.4	96.3	96.0	96.7
MASSACHUSETTS	97.1	96.6	96.4	96.8	96.9
MICHIGAN	93.7	94.1	94.1	94.4	95.6
MINNESOTA	96.8	96.9	97.1	96.7	96.1
MISSISSIPPI	85.5	87.0	86.0	86.3	87.2
MISSOURI	91.0	92.0	93.6	94.0	93.1
MONTANA	91.7	92.0	92.5	93.2	94.6
NEBRASKA	95.2	96.2	95.9	96.4	96.6
NEVADA	92.7	92.6	93.3	93.7	95.4
NEW HAMPSHIRE	95.4	95.0	96.2	95.4	96.0
NEW JERSEY	94.8	94.7	93.6	94.4	94.3
NEW MEXICO	85.8	85.8	87.1	88.4	90.2
NEW YORK	92.3	91.1	91.9	93.4	93.5
NORTH CAROLINA	91.9	91.9	91.8	92.5	92.7
NORTH DAKOTA	97.0	97.0	96.3	95.8	97.1
OHIO	94.6	95.2	94.5	94.6	94.9
OKLAHOMA	88.2	89.5	89.3	90.9	92.1
OREGON	92.3	94.5	94.7	93.9	94.8
PENNSYLVANIA	97.0	96.9	96.8	96.9	97.3
RHODE ISLAND	95.4	95.6	94.7	94.8	95.5
SOUTH CAROLINA	87.8	90.2	90.0	89.2	89.8
SOUTH DAKOTA	93.3	93.4	93.7	94.1	93.7
TENNESSEE	91.9	91.6	92.2	93.1	92.0
TEXAS	88.8	89.4	91.1	91.5	91.6
UTAH	95.9	95.6	96.2	95.9	96.0
VERMONT	93.9	94.9	94.4	94.2	94.6
VIRGINIA	93.2	93.0	92.6	94.8	94.3
WASHINGTON	96.4	97.1	96.8	96.0	96.8
WEST VIRGINIA	86.8	87.6	89.0	89.3	90.6
WISCONSIN	97.3	96.9	96.5	97.0	96.9
WYOMING	93.6	94.1	94.6	92.7	93.9

Exhibit VI

Public Utility Commission of Texas

June 30, 1994

COMPETITIVE EXCHANGE SERVICE DATA REPORT

Due date: August 15, 1994

COMPANY NAME_____

CONTACT PERSON_____ TITLE_____

ADDRESS_____

_____

TELEPHONE_____ FAX_____

If you have any questions about the information being requested, call Todd Baker (512/458-0149) or Candice Clark (512/458-0332).

To identify metro, rural, and other counties, refer to the attached list of county population groups.

1. **Which of the following services does your company provide WITHIN AN EXCHANGE in Texas?**

   ____ Private line or virtual private line service
   ____ C.O.-based PBX-type services for systems of 75 stations or more, as those services compete with customer premises equipment provided by PBX vendors
   ____ Billing and collection service
   ____ Non-voice data transmission service
   ____ Dark fiber service
   ____ Special access service
   ____ Resale or sharing of local exchange service (where such resale is allowed by commission-approved tariffs)
   ____ Any other service

2. **Have you filed an updated report for August 1, 1994, as required by PUC Subs. R. 23.61(k)?**

   _____ Yes _____ No

   If not, please attach it to this data report.

3. **Are your company's current rates on file with the PUC as required by PURA Section 18(d)?**

   _____ Yes _____ No

   If not, attach tables showing rates in effect on June 30, 1994, for all services provided. Note if any rates are not applicable statewide.

4. Revenues

List customer-billed revenues for each service by county population group for the calendar quarters shown below.

A. Intrastate Revenues

	INTRASTATE REVENUES			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Private line or virtual private line service				
Metro Counties				
Rural Counties				
Other Counites				
C.O. Based PBX-Type 75 Stations or more*				
Metro Counties				
Rural Counties				
Other Counites				
Billing and Collection Service				
Metro Counties				
Rural Counties				
Other Counites				
Non Voice Data Transmission Service				
Metro Counties				
Rural Counties				
Other Counites				
Dark Fiber Service				
Metro Counties				
Rural Counties				
Other Counites				
Special Access Service				
Metro Counties				
Rural Counties				
Other Counites				
Resale or Sharing of Local Exchange Service				
Metro Counties				
Rural Counties				
Other Counites				
Any other Service				
Metro Counties				
Rural Counties				
Other Counites				

*As described in question one on the cover page.

4. Revenues (cont'd.)

B. Interstate Revenues

	INTERSTATE REVENUES			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Private line or virtual private line service				
Metro Counties				
Rural Counties				
Other Counites				
C.O. Based PBX-Type 75 Stations or more*				
Metro Counties				
Rural Counties				
Other Counites				
Billing and Collection Service				
Metro Counties				
Rural Counties				
Other Counites				
Non Voice Data Transmission Service				
Metro Counties				
Rural Counties				
Other Counites				
Dark Fiber Service				
Metro Counties				
Rural Counties				
Other Counites				
Special Access Service				
Metro Counties				
Rural Counties				
Other Counites				
Resale or Sharing of Local Exchange Service				
Metro Counties				
Rural Counties				
Other Counites				
Any other Service				
Metro Counties				
Rural Counties				
Other Counites				

*As described in question one on the cover page.

5. Number of Customers

List number of customers for each service by county population group for the calendar quarters shown below.

A. Number of Residential Customers

	Number of Residential Customers			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Private line or virtual private line				
Metro Counties				
Rural Counties				
Other Counites				
Non Voice Data Transmission Service				
Metro Counties				
Rural Counties				
Other Counites				
Special Access Service				
Metro Counties				
Rural Counties				
Other Counites				
Resale or Sharing of Local Exchange Service				
Metro Counties				
Rural Counties				
Other Counites				
Any other Local Service				
Metro Counties				
Rural Counties				
Other Counites				

5. Number of Customers (cont'd.)

B. Number of Business Customers

	Number of Business Customers			
	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Private line or virtual private line service				
Metro Counties				
Rural Counties				
Other Counites				
C.O. Based PBX-Type 75 Stations or more*				
Metro Counties				
Rural Counties				
Other Counites				
Billing and Collection Service				
Metro Counties				
Rural Counties				
Other Counites				
Non Voice Data Transmission Service				
Metro Counties				
Rural Counties				
Other Counites				
Dark Fiber Service				
Metro Counties				
Rural Counties				
Other Counites				
Special Access Service				
Metro Counties				
Rural Counties				
Other Counites				
Resale or Sharing of Local Exchange Service				
Metro Counties				
Rural Counties				
Other Counites				
Any other Local Service				
Metro Counties				
Rural Counties				
Other Counites				

*As described in question one on the cover page.

For each service listed below, please provide the following information:

6. a. Identify and estimate the market share of known competitors for this service in metro counties.

b. Identify and estimate the market share of known competitors for this service in rural counties.

c. Identify and estimate the market share of known competitors for this service in other counties.

7. a. Identify or describe potential competitors for this service in metro counties.

b. Identify or describe potential competitors for this service in rural counties.

c. Identify or describe potential competitors for this service in other counties.

8. Describe any legal, technical or economic barriers to enter the market for this service. If these barriers are not present throughout the state, please indicate if they are present in metro, rural, or other counties.

Services

Private line or virtual private line service

C.O.-based PBX-type services for systems of 75 stations or more, as those services compete with customer premises equipment provided by PBX vendors

Billing and collection service

Non-voice data transmission service

Dark fiber service

Special access service

Resale or sharing of local exchange service

Any other service

Exhibit VII

LATAs and SMAs

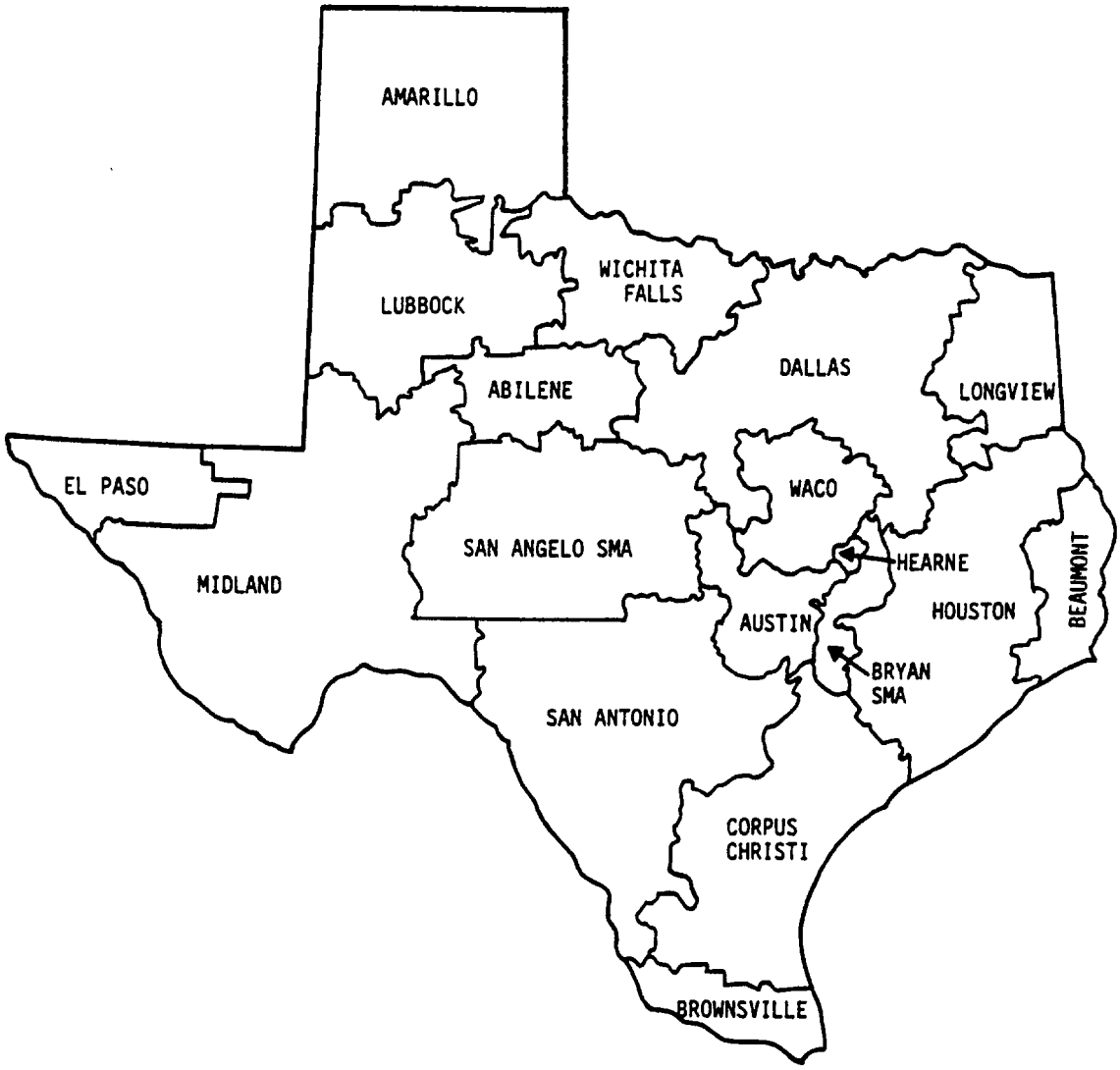


Exhibit VIII

Public Utility Commission of Texas

June 30, 1994

INTEREXCHANGE TELECOMMUNICATIONS CARRIER DATA REPORT

Due Date: August 15, 1994

COMPANY NAME _____

ACNA Code(s) (list all that apply)_____

CONTACT PERSON_____ TITLE_____

ADDRESS _____

TELEPHONE_____ FAX_____

If you have any questions about the information being requested, call Todd Baker (512/458-0149) or Candice Clark (512/458-0332).

1. **Which of the following categories describe your company? Please check all that apply.**

____ Facilities-based provider of interexchange service
____ Local private line service provider
____ Provider of billing and/or collection service
____ Aggregator
____ Operator service provider
____ Payphone provider
____ Reseller
____ Switchless reseller
____ Carrier's carrier
____ Agent marketer
____ Shared tenant service provider
____ Other (please elaborate):

_____

2. **Are your company's current rates on file with the PUC as required by PURA Section 18(d)?**

_____ Yes _____ No

If not, attach tables showing rates in effect on June 30, 1994, for all services provided. Note if any rates are not applicable statewide.

3. Operator Services

Does your company offer to any customers operator services for the handling of telephone service such as toll calling via collect, third-number billing, or calling card services?

_____ Yes _____ No

Is your operator service offering limited to calling card calls only?

_____ Yes _____ No

How can your customers access your operator services? Circle all that apply:

0 or 000+ 1+800 950-XXXX 10XXX Other (specify)

Does your operator-assisted MTS or operator surcharge revenue include any surcharge collected on behalf of a subscriber (e.g., a hotel)?

_____ Yes _____ No

If yes, what is the amount of the surcharge? Is the surcharge included in operator-assisted MTS or operator service surcharge revenue in question 5?

COMPANY NAME _____

4. Number of Presubscribed Lines as of June 30, 1994.

Report Texas access lines presubscribed to your intrastate services.

If you provide service to pay telephones, count each presubscribed telephone number as a separate customer.

For a list of metro, rural and other counties, refer to the enclosed list.

CLASS OF CUSTOMER	METRO COUNTIES	RURAL COUNTIES	OTHER COUNTIES
Pay telephone			
Business			
Residential			
Other (specify)			
TOTAL			

COMPANY NAME _____

5. Revenues.

Provide information on revenues from Texas intrastate operations during the semiannual periods shown below. Please report revenue by service category as listed on the chart. If you are unable to report revenues by service, list revenues in the service category that most nearly describes the way the revenues are generated.

Please report interLATA and intraLATA revenues separately, using the two charts below. If you are unable to report intraLAT revenues separately, fill in the first chart only and complete the column "Percent IntraLATA." If this figure is an estimate, mar it as such and describe the method used to make the estimate.

INTERLATA REVENUES	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2	Percent IntraLATA
Direct-dialed MTS					
Operator-assisted MTS					
Operator service surcharges					
MTS subtotal					
WATS-type					
Private line					
800 service					
Local service					
Other (specify)					
TOTAL					

INTRALATA REVENUES	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Direct-dialed MTS				
Operator-assisted MTS				
Operator service surcharges				
MTS subtotal				
WATS-type				
Private line				
800 service				
Local service				
Other (specify)				
TOTAL				

COMPANY NAME _____

6. Cost of Resold Telecommunications Services.

Provide information on your costs for Texas intrastate telecommunications services purchased from other carriers for resale durin the semiannual periods shown below. Please report your costs of resold service by service category as listed on the chart. Service categories on this chart refer to the types of service you purchased. If your company purchased WATS and resold the service as MTS, report the cost in question 6 under WATS.
Report costs of resold interLATA and intraLATA service separately, using the two charts below. If you are unable to report intraLATA costs separately, fill in the first chart only and complete the column "Percent IntraLATA." If this figure is an estimat so indicate and describe the method used to make the estimate.

Cost of Resold IntraLATA Services	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2	Percent IntraLATA
Direct-dialed MTS					
Operator-assisted MTS					
Operator service surcharges					
MTS subtotal					
WATS-type					
Private line					
800 service					
Local service					
Other (specify)					
TOTAL					

Cost of Resold InterLATA Services	1992 Quarters 3 & 4	1993 Quarters 1 & 2	1993 Quarters 3 & 4	1994 Quarters 1 & 2
Direct-dialed MTS				
Operator-assisted MTS				
Operator service surcharges				
MTS subtotal				
WATS-type				
Private line				
800 service				
Local service				
Other (specify)				
TOTAL				

Exhibit IX

RESELLERS THAT FILED THE 1994 IXCDR

A Body Shop-The Hair Salon, Inc.
AA Operator Services
AA Telecom Services
AAA Operators
Accelerate Services
Access Long Distance
Access Operators
Access Telecommunication Group, L. P.
Accurate Operators
Action Telecom Company
Active Operators
Afarensis Telcom
Affinity Fund, Inc.
Affinity Network, Inc.
AIS Telecommunication Services, Inc.
Alamo Long Distance Network
Alamo Operators
Allbritton & Associates
Allcomm Long Distance, Inc.
Allen's Operators
Allgood Taylor Telephone
Allnet Communication Services, Inc.
Altina Operators
Ameri-I-Net Services Corporation
Ameri-Tex Medical Billing Service
American Central Corporation
American Long Distance Network
American Long Distance Services, Inc.
American Network Exchange, Inc
American Operators
American Tel Group, Inc.
American Telco, Inc.
American Telephone Network, Inc.
American Teletronics
Amerifax, Inc.
Amtel Corporation
Amy Weeks dba Aim High Operators
Answer-Net, Inc.
Apple Communications Corporation
April Howard dba Jordan Communications
ARN Communications Corporation
Ascending Technologies, Inc.
Ashton Kaylynn Bailey dba ABC Communications
Atlantis Network
Austin Bestline
Autocall
Automated Communications, Inc.
B & L Communications
Baker & Associates
Bankers Exchange
Best Operators
Betts & Associates
BI-STATE Communications
Boisei Telnet
Bond Connect Call
Border Communications
Bottom Line Telecommunications, Inc.
Brayle Communications
Brenda's Batch
Briteway Telecom
Budget Communications
Budget Long Distance
Budget Tell
Business Brokers Network
Business Telecom, Inc.
C.C. Enterprises
Call Network
Call-For-Less Long Distance Company
Callaid
Capital Network System, Inc.
Capital Telecommunications, Inc.
Care Leasing
Careful Operators
Central Operators
Central Payphone Services, Inc.
Central Telephone Company
Challenger Network (TX), Inc.
Cherry Communications
Choice Communications
CIMCO Communications, Inc.
Cinch Teleservices
CLF Communications
CM Operators
Coast International, Inc.
Coastal Telephone Company
Coin Phone Management Co.
Collect Call Services
Colorado River Communications Corp.
Comanche County Long Distance (CCLD)
Comet Communications
Comitcom
Comm/Net Services, Inc.
Communicall, Inc.
Communication Alternatives
Communication TeleSystems International
Communications & Travel Services, Inc.
Communications Gateway Network, Inc.
Communications Management Systems
Comnet
ComTel Computer Corp.
Comtrex Telecom
Comtrust
Concord Telephone Services
Connect America Communications, Inc.
ConQuest Operator Services Corp.
Constellation Network
Consumer Data Solutions Corp.
Continental Communications
Continental Long Distance Corporation
Corporate Telemanagement Group, Inc.
CR Communications
Cresent Communications

RESELLERS THAT FILED THE 1994 IXCDR

Crosland & Associates
Crystal Network
CTT Telecom
D. H. Communications
D. W. Dwyer & Associates
D.C. Telelink
Danny Howard dba Howard Communications
Dash Long Distance
Delta Phone Net
DeltaCom, Inc. dba DeltaCom Long Distance Service
Diamond Communications
Diane Allen Enterprise
Digicom Teleservices
Digital Communications
Digital Network, Inc.
Digitech Operators
Digitran Corporation
Direct Operators
Discount Operators
Discount Telecom
DNS, Inc. (Digital Network Services)
Do-U-Tell Long Distance
Dydan Company
Econocom Long Distance
Economy Communications
Economy Communications, Inc.
Economy Long Distance
Efficient Operators
Emerald Connection
Enhanced Communications Corp. dba Jet Comm. USA
Equal Net Communications, Inc.
Excel Telecommunications, Inc.
Executive Operators
Expansion Telecom
Fairchild Communications Services Company, Inc.
Fairway Commmunications
Fax-A-Gram
Federated Telephone Company, Inc.(FEDTEL)
First Choice Network, Inc.
First Fone Long Distance
Flexible Long Distance
Floordecor
Friendly Communications
Friendly Operators
Fuller-Ross Advertising, Inc.
Future Connect
Future Telephone Communications
G Tom Communications
GE Capital Communications Servies Corp.
General Communications Services
General Operators
Glacier Communications
GlobalCom Telecommunications
GTE Telecommunications Services, Inc.
Hare Office Products and Communications
Heartline Communications, Inc.
Hereford Long Distance Services, Inc.
Hi-Plains NTS Communications, Inc.
Home Owners Long Distance, Inc. (HOLD)
Hospitality Communications Corporation
Hotel Communications, Inc.
Hotel Networks Corp.
I.Q. Long Distance
IACT Services
ICOM Long Distance
IDB WorldCom Services, Inc.
Image Communications
Impulse Telecom
Industrial Network
Info-Tel, Inc.
Integrated Teletechnologies, Inc.
Intellicall Operator Services, Inc.
International Discount Telecommunications Corp.
International Telecommunications Exchange Corp.
International Telemanagement Group, Inc.
Interstate Operators
Intrastate Operators
ITC Tele-services, Inc.
Jamie's Operators
Jeff Allen Enterprises
JenCom Communications
Jody Edwards & Associates
John Allen Enterprise
Jurassic Telecom
K-Tel Communications
Kappa Network
Kathleen Harrison dba Kat's Communications
Katoma-Lee Operators
Ken Allen Insurance
Keystone Telecommunications
Kinetic International Communications, Inc.
King Communications
KRB Telecom, Inc.
La Operadora Buena
La Operadora General
Lacy Weeks dba New Dawn Operators
Langley Telecommunications
Law Communications, Inc.
LCT Long Distance, Inc.
LDCC, Inc.
LECNet, Inc.
Lifestyle Operators
Limbic Connect Net
LinkUSA Corporation
LiTel Communications, Inc. dba LCI International Telecom Corp.
Lone Star Long Distance Network
Long Distance Network
Long Distance Network Operator Services, Inc.
Long Distance Savers - Longview, Inc.
Long Distance Savers of the Metroplex, Inc.
Long Distance Transfer, Inc.
Loos Operators
Luxor Telecom
M N Communications

RESELLERS THAT FILED THE 1994 IXCDR

Mammoth Communications
Marin Telemanagement Corporation
Martee Operators
Marvin's Place
Matrix Telecom
McReynolds & Associates
Menu Media
Metroplex Movers, Inc.
Mettle Telecomm
MFS Intelenet of Texas, Inc.
Midwest Fibernet, Inc.
Mikal's Communication
Military Communications Center, Inc.
Millenium Communications
Mountaineer Long Distance, Inc. dba Thrifty Call
Mousterian Communications
Murdock, Remmers & Associates, Inc.
Nan Communications
NanCom Telehelp
National Accounts, Inc.
National Brands, Inc. dba Sharenet Comm. Co.
National Operators
NationsBell, Inc.
Nationwide Long Distance Network
Nationwide Long Distance, Inc.
NBC Telecommunications
Net Loc
Network Long Distance
Network Operators
Network Plus, Inc.
Network Services, Inc.
Norstan Network Services, Inc.
Northeast Operator Services Corp.
NPH Communications
Ogden Operator Services
Oilfield Phone Service Company
Omega Telecommunications
One to One Communications, Inc.
Operadora Espanol
Operator Communications
Opserve Communications
Opticom
Orbital Network
Oros & Associates
P J Telecom
Paleo Network
Paragon Communications, Inc.
Parietal Services
Patroit Operators
Pecky & Associates
Peltier & Associates
Pennsylvania Alternative Communications, Inc.
Pennypincher Long Distance
Peoples Telephone Company, Inc.
Phoenix Network, Inc.
PhoneTel Technologies, Inc.
Polar Communications Corp.
Polite Operators
Popular Long Distance
Preferred Network
Premiere Communications, Inc.
Prime Telecom, Inc. (PTI)
Professional Communications Management (PROCOM)
Professional Operators
Progressive Communication Technologies, Inc.
Progressive Concepts, Inc.
PSP Marketing Group, Inc.
Public Operators
Purcom Long Distance
Quality Communications
Quest Communications Corporation Inc.
Quest Telecommunications, Inc.
R & B Enterprises
R H R Telecom
R M Operators
R. A. Ross & Associates
RCI Long Distance, Inc.
RD&J Communications, Inc.
RealCom Office Communications, Inc.
Reliable Operators
Resource Innovations Group, Inc.
Ri Com Operators
Ritel Long Distance
Rivet Operators
RMS Operators
Robustus Network
Rockemcom Long Distance
Roger Weeks dba Weeks Commuications
Royal Operators
Runcom Long Distance
Ry Network
Ryan Tel Operators
S J R Telecom
Sagital Systems
Samuel Paul Allen dba Sam's Communications
SBD Long Distance
Service Call Company
Settoon Operators
SFT Communications
ShareCom Long Distance Co.
ShareCom Network Co.
Sharon Weeks dba Good News Operators
SiCom Operators
Sincere Operators
SkyLink Teleservices
Sleigh Coffee Co., Inc.
Smooth Operators
Southeast Operators
Southern Long Distance Network
Southern Operators
Southern Pacific Telecommunications Company
Southern Telecom
Southwestern Communications
Southwestern Telecom, Inc.

RESELLERS THAT FILED THE 1994 IXCDR

Special Operators
Specialized Network Services, Inc.
Standard Long Distance
Star Tel of Lufkin
Star Tel, Inc.
Start Technologies Corporation
Stenocall
Stone & Company
Stotel
Strategic Alliances, Inc.
Student's Operators
Susan Joy Allen dba Dialon Operators
Synergy Telemanagement, Inc. dba NTS Communications
T Resources, Inc.
T W Assist Operators
T-n-N
Talk 'N Toss, Inc.
Tease Communications
Tel-Com Communications
TEL-OP Services
Tel-Save, Inc.
Tel-Span Communications, Inc.
Telcorp Corporation dba Telcorp International
Telcorp, Ltd.
Teldata Enterprises
Tele-Pro Communications, Inc.dba Petracom
Telecare, Inc.
Telecommunications Service Center, Inc.
TeleDebit, L.P.
Telenational Communications Limited Partnership
Telephone Express
Teleplus Inc.
Telesys Services
Teltrust Communication Services, Inc.
Terra Amata Communications
Texas Operators
The Carroll Company
The Hogan Company
The Lewis Company
The Makemo Company
The Operator
The Pool Doctor
Thrift Communications
Thrifty Long Distance
Titanic Telecomm
Total National Telecomm
Total Telecommunications, Inc.
Total-Tel USA Communications, Inc.
Totalnet Communications, Inc.
Touch - 1 Long Distance Inc.
Trans National Communications, Inc.
Traveler's Operators
Tri-State Communications, Inc.
Triax Telecom, Inc.
Triplett & Associates
TTG Comm Operators
Turnaround Communications
U.S. Communications, Inc.
U.S. Digital Network L.P. dba USDN Long Dist. Network L.P.
U.S. Long Distance, Inc.
U.S. Metro Line Services, Inc
U.S. Operators
U.S. Osiris Corporation
U.S.A. Operators
UniDial, Inc.
Union Long Distance
Unit Telecomm
UNITEC, Inc.
United Operators
United Telephone Long Distance Company
USX Consultants, Inc.
Valence Nework
Valu-Line of Amarillo
Valu-Line of Longview, Inc.
Value-Added Communications, Inc.
VarTec National, Inc.
Vista International Communications, Inc.
Voice Retrieval and Information Services, Inc.
WATS International Corporation
West Enterprises
West Texas Communications
WestCom, Inc.
Westel Inc.
Western Operators
Western Union Communications, Inc.
Wholesale Long Distance
Widespread Teleserv
World Telecom Group, Inc.
World Wide Communications
WorldTel Services, Inc.
Worldwide Operators
Young's Operators

IXCS FAILING TO FILE THE 1994 IXCDR

Access One, Inc.
Ace Cash Express, Inc.
ALD Communications, Inc.
Alexacall Payphone Co.
All States Telephone Co., Inc. dba Westlink Telecom, Inc.
Alliance Corporate Communications
Ameriphone Corporation
Amerishare Communications, Inc.
Amtel Communications Services, Inc.
AP&T Services, Inc.
At Office Moving Specialists
Awesome Paging, Inc.
AXCES dba Axces Communications
Buehner-Fry, Inc.
Business Choice Network, Inc.
Byron Nemic dba Byron's Operators
C. Jean Coonts dba Longhorn Operators
Call America
Call America Business Communications, Inc.
Cambridge Communications Group, Inc.
Carrier Concepts International Corp.
Cellular Long Distance Company
Century Communications
Coastal Automated Communications Corp.
Coastal Communications
Communications Transmission Group
Concord Network, Inc.
Craddock Engineering, Inc.
Cynthia J. Coonts dba Lone Star Operators
Cytel Corporation
DBJ, Inc.
Digicom
Digital Dial Communications, Inc.
East Texas Fiber Line, Inc.
Eastern Telecom Corporation
Econo-Call of El Paso, Inc.
Enterprise Telcom Services, Inc.
Executone Information Systems, Inc.
Fastline Telecommunications
Feeks Telecommunications, Inc.
Fibertech Communications, Inc.
Fibertech Telecom, Inc.
First Fone of San Marcos
FONnet
Friendship Long Distance
Global Telcoin
Global WATS One
Great Lakes Telecommunications Corp.
Greatland Telecommunications and Services, Inc.
Guide Network International
Harvey Hotel Company, Ltd.
Highland Communications, Inc.
Holiday Inns, Inc.
Hospitality Communications, Inc.
Hotelco
Index Telecom
Inter-Tel Net Solutions, Inc.
Jody Edwards & Associates
Kirby Communications International, Inc.
L.D. Communications, Inc.
LCF, Inc.
Liberty Bell Corporation
Lone Star Telecom
Long Distance Services, Inc.
Long Distance/USA, Inc.
Marytel Communications
Metro-Link Telecom, Inc.
MFN Communications
Mid-Com Communications Inc.
Mid-Continent Communications Company
National Communications Association, Inc.
National Independent Carrier Exchange, Inc.
National Telecommunications of Dallas
National Telecommunications of Houston
National Telecommunications of San Antonio
Net Fone
North American Intelecom, Inc.
NOS Communications, Inc.
Opus Correctional, Inc.
Payline Systems, Inc.
Power M Communications Corporation
PowerNet Communications
Premier Billing Services, Inc.
Prime Time Telecommunications, Inc.
Public Communications Systems
Q & E Communications
Ropir Industries, Inc.
Ryan Nemic dba R.J.'s Communications
Sonic Communications, Inc.
Southland Corporation
Southnet Corporation
Southwest Pay Telephone Systems, Inc.
Southwest United Communications, Inc.
SpectraNet, Inc.
St. Pierre Communications
Standard TelCom Long Distance, Inc.
Star-Tel of Abilene
StarTel Communications, Inc.
Target Telecom
Tele-Systems, Inc.
Tele-Trend Communications, Inc.
Teleclose, Inc.
Telecommunications Group, Inc.
Telefind Corporation
Telegroup, Inc.
Telenet Communications
Telesav, Inc.
The Carroll Company
TRI-TEL Communications of El Paso
TSA Consultants, Inc.
U.S. Digital Networks, Inc.
United Terminating Services Limited Partnership

IXCS FAILING TO FILE THE 1994 IXCDR

Unitel
US FiberCom Network, Inc.
US WATS, Inc.
USC Communications, Inc.
USST of Texas, Inc.
VNI Communications, Inc.
WATS/800, Inc.
West Coast Telecommunications, Inc.
Westinghouse Electric Corp. dba Westinghouse Communications
Wireless Solutions Corporation
Xiex Telecommunications, Inc.
Zero Fone